Regional Cooperation Agreements

Joint Development of Guidelines for Consultation by Perinatal, Neonatal and Other Specialty Disciplines

I. Standard

California Children's Services requires that all CCS Approved NICU's, in addition to complying with the Title 22 consultation requirement for referring hospitals, enter into Regional Cooperation Agreements with approved level facilities (3.25.B.3.a.1-5) for the joint development of guidelines for obtaining consultation for perinatal, neonatal and other specialty disciplines.

II. Process

A. Determination of Conditions Necessitating Consultation

Multidisciplinary consultation is a component of each area required in an RCA. Integration of clinical services, basic through subspecialty, within a regional referral area provides access to comprehensive care at the appropriate level for the entire population. Risk identification and assessment of problems that are expected to benefit from consultation, as well as anticipatory planning should be part of the Agreement. The RCA includes specific services that are to be available depending upon the level of the facility, examples of which are:

1. A CCS Approved Regional NICU: there shall be a written agreement for providing telephone consultation from an MSW on a 24-hour basis (Section 3.25.1/H)
2. There shall be a written agreement for providing telephone consultation from a clinical registered dietitian (Section 3.25.1/H)

Subspecialty consultation services that are not routinely provided by the receiving center, with which the Agreement is held, may be a negotiated element of the RCA. Attachments A-1 and B located in Section 5 list examples of subspecialty consultation services that may be a part of an RCA with a Regional NICU.

B. Review and Approval of Consultation Services

The designated representatives from the referring and receiving facilities should participate in an assessment of the conditions and problems that would necessitate consultation and discuss any other anticipatory planning needs, prior to developing an Agreement. All contact and communication procedures should be well defined prior to the completion of the Agreement. As with the other components of the RCA, regular evaluation should be part of the contract process.

Regional Cooperation Agreement

Joint Development of Guidelines for Maternal and Neonatal Patient Referral and Transport To and From Each Facility/NICU

I. Standard

California Children's Services Standards require that the CCS Approved Regional NICU, in conjunction with the contracting hospital (i.e., CCS-Community and Intermediate NICUs), develop and implement a plan for the joint development of guidelines for maternal and neonatal patient referral and transport to and from each facility/NICU. (3.25.B.3.a.1-5)

II. Process

A. Development of Joint Guidelines: (See Section 4, Transfer and Transport Agreements) An interhospital transfer/transport program should provide 24-hour service. It should include a receiving or program center responsible for ensuring that high-risk patients receive the appropriate level of care, a dispatching unit to coordinate the transport of patients between facilities, an appropriately equipped transport vehicle, and a specialized transport team. The program also should have a system for providing a continuum of care by various providers, including the personnel and equipment required for the level of care needed, as well as outreach education and program evaluation.

Formal transfer/transport agreements between hospitals are developed to outline procedures for transport and responsibilities for patient care. Specific responsibilities of both the referring and the receiving hospitals must be clearly delineated, especially with regard to which institution assumes responsibility for the care of the patient(s) at which point in the transfer process.

Specific guidelines must be developed between the two centers to jointly address: 1) risk identification and assessment of problems that are expected to benefit from consultation and/or transport, 2) assessment of each center's perinatal capabilities and determination of conditions necessitating consultation, referral or transfer, 3) reliable, accurate and comprehensive communication between these two centers, and 4) determination of each center's specific responsibilities with regard to patient management.

B. Review and Approval of Transport Guidelines:

The designated representatives at both the CCS Approved Regional NICU and the contracting hospital jointly review the guidelines for content, completeness and clinical appropriateness. The reviewer(s) and the contracting hospital representatives jointly discuss any discrepancies or suggestions for changes in the referral/transfer guidelines.

Once approved, the guidelines are attached to the RCA and signed off by appropriate personnel. The guidelines are jointly reviewed and revised as necessary on an as-needed basis.

Joint Identification, Development and Review of Protocols

I. Standard

California Children's Services Standards require that the CCS Approved Regional NICU or Community level NICU, in conjunction with the contracting hospital, identify the medical and nursing protocols necessary for the provision of Perinatal and Neonatal care and that these protocols are approved by the CCS Approved Regional NICU every two years.

II. Process

A. Designation of Appropriate Staff and Determination of Topic Areas

The CCS Approved Regional NICU identifies appropriate medical and/or nursing representatives, typically the Chief of Neonatology, Chief of Maternal Fetal Medicine and/or their clinical designee, typically the Neonatal Clinical Nurse Specialist and Perinatal Clinical Nurse Specialist, to meet with the contracting hospital representative, typically the NICU Nurse Manager or her designee (Neonatal Clinical Nurse Specialist, Nurse Educator, or other lead staff) to jointly determine the list of protocols and procedures needed for review.

Attached please find a sample list of protocol topic areas, which would be appropriate for Perinatal and Neonatal review. There is not a standard list of protocols. To receive a copy of one of the protocols listed on the following pages, please contact your Regional Perinatal Program Director (see geographic listing under www.perinatal.org).

B. Review and Approval of Protocols and Procedures

The designated representative(s) at the CCS Approved Regional NICU review(s) selected protocols for completeness and clinical appropriateness. The reviewer and the contracting hospital representatives should jointly discuss any discrepancies or suggestions for changes in clinical practice.

When approved, the designee of the CCS approved Regional NICU signs off on the protocols.

SAMPLE TOPICS for PROTOCOLS

Regional Cooperative Agreement
Tool Kit

Perinatal:

1. Abandonment, Infant
2. Abduction, Infant/Child
3. Acuity System – Patient Classification and Audit for Labor & Delivery – Sacramento
4. Admission Assessment Record – Perinatal
5. Admission of a Normal Newborn
6. Admission to the Perinatal Unit (Labor & Delivery)
7. Adoption
8. Amniocentesis
9. Amnioinfusion
10. Amniotic Fluid Index
11. Anesthesia Coverage for the Perinatal Units
12. Antepartum Testing
13. Attendance at Deliveries
14. Blood Sampling of the Neonate
15. Breast Pump – Use of
16. Breastfeeding Management – Well Baby
17. Breastfeeding Teaching Normal Newborn
18. Car Seat Safety – Infant & Child
19. Circumcision – Assistance with Neonatal
20. Code Blue Response in Obstetrical Operating Room
21. Consultation and Transfer of a Patient to a More Intensive Care Level
22. Coombs Screening
23. Cord Blood Collection for Stem Cell Preservation
24. Cord Blood Gases
25. Demise – Fetal
26. Discharge of the Normal Newborn
27. Emergency Infant Equipment Inspection – Perinatal/Neonatal
28. Emergency Management – Neonatal/Perinatal Departments
29. Epidural Anesthesia for Labor & Delivery
30. Equipment/Instrument Cleaning, Disinfection and Sterilization
31. Evacuation – Maternal
32. Eye Care of the Newborn, Prophylactic – Perinatal/Neonatal
33. Fall Prevention – Perinatal
34. Fetal Monitor Strip Documentation
35. Fetal Monitor – Cleaning of Accessories
36. Fetal Scalp Electrode – Application of the
37. Fetal Surveillance
38. Formaldehyde Handling and Spills
39. Glucose Screening
40. Hepatitis B, Hepatitis C, and HIV Positive Mothers and Their Infants – Care of
41. Hyperbilirubinemia, Phototherapy, Jaundice
42. Identification and Security of Newborn Infant
43. Induction/Augmentation of Labor
44. Infant Formula
45. Infection Control – Perinatal and Neonatal Care Areas
46. Intrapartum Summary Nursing Record, Use of the
47. Labor & Delivery Log – Completion of the
48. Laboratory Specimen Identification
49. Laboring Patient – Nursing Care of the
50. Magnesium Sulfate by Intravenous Infusion – Administration of
51. Medical Screening/Observation – Labor & Delivery
52. Neonate – Daily Care of the
53. Newborn Screening
54. Non-Viable Live-Born Infant – Nursing Care of the
55. Neonatal Resuscitation Program (NRP) Certification Verification
56. Obstetrical Medical Screening Exam

SAMPLE TOPICS for PROTOCOLS

57. Obstetrical Surgical Time-Out
58. Overflow Policy for the Perinatal Units
59. PAC Nurse Policy (Sacramento)
60. Pain Management – Normal Newborn
61. Pathology Specimen Collection
62. Patient Care Assignments in the Perinatal Units
63. Perioperative Care in the Perinatal Unit
64. Photography/Videotaping in the Perinatal/Neonatal Units
65. Post-Operative/Post-Delivery Period – Care in the Immediate
66. Postpartum Patient – Nursing Care of the
67. Preterm Labor for Patients on Oral or Subcutaneous Tocolytics – Management of
68. Protection – Infant/Child
69. Relationship of Perinatal/Neonatal Units to other Hospital Services
70. Sanitation
71. Scope of Services for Perinatal/Neonatal Women & Children's Capital Service Area
72. Security Tagging System Operation, Perinatal, ICN and Pediatrics – Sacramento
73. Security Tagging System Operation – SSC
74. Specimen Testing/Screening on Unit – Perinatal/Neonatal
75. Substance Abuse in the Perinatal Period
76. Surrogate Birth
77. Telephone Advice – Documentation of Labor & Delivery
78. Terbutaline Pump Therapy for Treatment of Preterm Labor
79. Thermoregulation of the Infant
80. Transport from the Perinatal Units – Maternal
81. Umbilical Cord – Management of
82. Utilization – Normal Newborn Nursery
83. Vacuum Extraction for Vaginal/Cesarean Delivery
84. Vaginal Delivery – Nursing Care During
85. Version

Neonatal:

1. Abandonment, Infant
2. Abduction, Infant/Child
3. Admission of a Normal Newborn
4. Admission to ICN/Intermediate Care/Special Care Nurseries/Continuing Care Nursery
5. Adoption
6. Assignment of Patients
7. Blood Product Management
8. Blood Sampling of the Neonate
9. Breast Pump – Use of
10. Breastfeeding Management – Well Baby
11. Bronchoscopy, Assistance with
12. Broviac Catheter
13. Car Seat Safety – Infant & Child
14. Census – High (Intensive Care Nursery)
15. Central Venous Catheters – Percutaneous Insertion of
16. Chest Tube Insertion and Utilization of the Chest Tube Drainage Apparatus
17. Circumcision – Assistance with Neonatal
18. Co-Bedding of Multiples
19. Colostomy & Ileostomy: Neonatal Management
20. Consultation with Outside Medical Services
21. Coombs Screening
22. Demise – Neonatal
23. Developmental Supportive Care
24. Discharge of the Normal Newborn
25. Discharge Planning for Infant Requiring Home Apnea Monitor and/or Oxygen Therapy
26. Discharge Planning and Criteria for Discharge of High Risk Infants from the Nursery
27. Documentation
28. Emergency Infant Equipment Inspection – Perinatal/Neonatal
29. Emergency Management – Neonatal/Perinatal Departments
30. Equipment/Instrument Cleaning, Disinfection and Sterilization
31. Evacuation – Neonatal

SAMPLE TOPICS for PROTOCOLS

32. Eye Care of the Newborn, Prophylactic – Perinatal/Neonatal
33. Eye Exam – Neonatal
34. Follow-up of High Risk Infant
35. Gastrostomy Tube Placement and Feeding
36. Gavage Feedings – Neonatal
37. Glucose Screening
38. Hepatitis B, Hepatitis C, and HIV Positive Mother and Their Infants – Care of
39. Hyperalimentation and Intralipids
40. Hyperbilirubinemia, Phototherapy, Jaundice
41. Identification & Security of Newborn Infant
42. Immunization Administration
43. Infant Formula
44. Infection Control – Perinatal and Neonatal Care Areas
45. Intravenous & Intra-Arterial Access Lines – Management of
46. Intravenous Immunoglobulin (IVIG Therapy)
47. Kangaroo Care
48. Laser Eye Surgery – Assistance with
49. Medication Administration
50. Monitoring – Cardiac/Apnea
51. Multi-Disciplinary Rounds
52. Nasal C-Pap Care of the Neonatal Patient
53. Neonate – Daily Care of the
54. Newborn Screening
55. Neonatal Resuscitation Program (NRP) Certification Verification
56. Nitric Oxide Ventilation Neonatal
57. Non-Viable Live-Born Infant – Nursing Care of the
58. Nursing Care Monitoring Activities: ICN
59. Nursing Care Monitoring Activities: SCN
60. Nutritional Assessment
61. Orientation/Training of Float Personnel to ICN/Intermediate/Continuing Care Nurseries
62. Orientation/Training of New Employees to ICN/Intermediate/Continuing Care Nurseries
63. Oxygen Therapy/Respiratory Care Standards
64. Pain Management – Neonatal
65. Physician Call System – Report of Patient Status
66. Procedural Sedation
67. Referral to Outside Neonatal Units
68. Refrigerator-Freezer Temperature Monitoring
69. Relationship of Perinatal/Neonatal Units to other Hospital Services
70. Rooming-In Guidelines
71. Scope of Service for Perinatal/Neonatal Women & Children's Capital Service Area
72. Security Tagging System Operation – Infant
73. Security Tagging System Operation – SSC
74. Skin Care
75. Specimen Testing/Screening on Unit – Perinatal/Neonatal
76. Staff Development
77. Staffing Guidelines for ICN/Intermediate/Continuing Care Nurseries (Nurse-Patient)
78. Substance Abuse in the Perinatal Period
79. Sucrose Pacifier
80. Suctioning – Endotracheal Tube
81. Surfactant Administration
82. Surgical Care of the Newborn
83. Surrogate Birth
84. Synagis Prophylaxis
85. Thermoregulation of the Infant
86. Tracheostomy Care
87. Transcutaneous Monitoring HP Module in PSCS
88. Transfusion Ordering, Obtaining, and Transfusing Packed Red Blood Cells
89. Transfusion – Exchange
90. Transport – Neonatal SAC
91. Umbilical Cord – Management of
92. Visiting – Neonatal
93. Withdrawal, Infant

Joint Review of Outcome Data

I. Standard

CCS requires that under the Regional Cooperation Agreement, there be "joint review of outcome data, based on CCS requirements, at least annually."

II. Process

It is the joint responsibility of the CCS Approved Regional NICU and the contracting hospital to determine process for reviewing outcome data, such as CPQCC and transport. This can best be accomplished through a meeting of multi-disciplinary teams from each facility. These teams may be composed of the following members: Chief of Maternal-Fetal Medicine or Obstetrics, Nurse Director for Maternal Child, Perinatal Clinical Nurse Specialist, Chief of Neonatology, Nurse Director for the NICU, Neonatal Clinical Nurse Specialist and Data Coordinator.

Agreement on maternal and neonatal data sets should occur and a process for benchmarking and trending data allows for comparative data analysis. Each facility shall maintain data on CPQCC indicators mutually agreed upon between contracting hospitals. The data sets should be compiled by the CCS Approved Regional NICU and sent to the contracting hospital prior to the meeting so that the discussion in the meeting will reflect adequate analysis of the data. Minutes of the meeting will include the suggestions that both facilities will be making in clinical management of patients and quality improvement.

III. Joint Review of Maternal Data

Perinatal data sets should be shared across contracting hospitals. The minimum data set should include data elements in Perinatal Profiles (birth certificate data) and agreed upon morbidity indicators. These may include morbidity indicators such as postpartum hemorrhage, health promotion indicators such as breastfeeding rates upon discharge, and/or indicators of special significance such as sentinel events.

Example of Advanced Individual Hospital Data Sets

FPAD

The Sutter Health system and other hospitals are involved in a clinical initiative called First Pregnancy and Delivery (FPAD). Here, data elements are collected on mothers who are para 0, with a singleton gestation, in vertex position, and are >/= 37 weeks gestation. There are several goals to achieve within this initiative: Lower C/S rates in this population, reduce episiotomies and 3rd and 4th degree lacerations, reduce the percentage of this population who are admitted less than 3cm dilation, reduce the percentage of this population who are induced, and reduce the number of apgars < 7 at 5 minutes. Data is collected on a quarterly basis from each Sutter Facility, compiled and graphically presented quarterly and at year-end, with the target goal highlighted and each facility compared side by side. An example of the FPAD presentation is enclosed. *(Hospital names have been removed to maintain confidentiality.)*

For Regional Cooperation Agreements between Sutter Facilities and a Sutter Regional Facility, this FPAD data has been used to promote discussion between Maternal-Fetal Medicine Specialists, Obstetricians, obstetricians, and Clinical Nurse Specialists regarding practices and changing of practices to help achieve the goals set forth in this clinical initiative.

IV. Neonatal Data Set

California Perinatal Quality Care Collaborative (CPQCC) Data

If the Regional facility and the community facility both participate in the California Perinatal Quality Care Collaborative (CPQCC) Small baby (<1500 gms.) data collection, it is to be used for review. California Children's Services (CCS) requires the submission of this data on an annual basis from CCS approved hospitals. This data set is forwarded to the Vermont Oxford Neonatal Network (VON) for inclusion in a worldwide database with a total of 442 NICU's participating. Three Hundred and Eighty-four of these NICUs are from the United States, 93 of which are in California. The data is compiled and analyzed by VON and sent back to CPQCC for distribution to each participating NICU in California.

The annual report prepared by VON is called the *Annual Quality Management Report*, and is sent to each facility by CPQCC in September. The annual report contains a table found in Section 14, Table 14.1, called FINAL QUARTERLY BIRTHS REPORT. It is suggested this table of data be obtained for both the Regional and the Community facilities.

Using the data from table 14.1 from both the Regional facility and the Community facility, it is recommended the Regional facility present a side by side comparison of the data, in graphical format, to illustrate the differences and/or similarities between the Regional facility, Community facility and the whole of Vermont Oxford Network NICUs. Viewing the data together with Neonatologists from each facility often presents the opportunity to openly discuss and share information about practices within the NICU.

Enclosed is an example of the layout of such a graphical format. In this example you will notice several points of interest, and discussions that may arise from this data:

1. The regional facility has on average a slightly higher incidence of PDAs. *You may want to have ready the distribution of birthweights for the Regional facility, the Community hospital and VON overall. Does the Regional facility have a higher incidence of <1000-gram infants? What could account for the higher incidences?*

2. The Community facility utilized Indomethacin 2 to 3 times more than the regional facility and the regional facility performs more ligation than does the community facility or VON overall. *What factors may play into the decision between treating with medicine vs. ligation?*

Data displayed in relation to each other is usually helpful when viewing graphs. For example, you may want to cluster graphics of delivery resuscitation efforts together on one page or 2 opposing pages so it can be viewed all together at the time of presentation.

V. Morbidity and Mortality Data Review

Review of outcome data may also include the review of data for Morbidity and Mortality (M&M) conferences. Perinatal data may be reviewed monthly by a multi-disciplinary group to include physicians, nurses, administrators, social workers, respiratory therapists, nutritionists, and others. Data reviewed at this conference includes trending by month/year of the following data elements: deliveries, low birthweight rates, cesarean section rates, VBAC rates, stillbirths, and maternal and neonatal transports. Cases may be presented regarding neonatal deaths, a rare maternal death, or an unusual presentation of symptoms/course of events for either maternal or neonatal patients for educational purposes.

Perinatal Morbidity and Mortality Reviews
Suggested Guidelines for Case Selection

Retrieve patient medical records for each case which falls with the MUST REVIEW CATEGORIES specified below. Both maternal and newborn records should be pulled for review, and fetal monitoring strips should be made available.

Randomly select and retrieve patient medical records for cases from the OTHER REVIEW CATEGORIES. One case may represent more than one category. Both maternal and newborn records and fetal monitoring strips should be made available for review.

All cases should be selected from within the past 12 months. All information obtained during review of records and discussion about these cases will remain confidential between the hospital and the reviewers.

MUST REVIEW CATEGORIES

MATERNAL

- Intrauterine Fetal Death > 20 Weeks Gestation
- Major Operative Procedure Other than C-Section
- Maternal Admission to Intensive Care Unit
- Maternal Death
- Maternal Transport
- Preterm Labor / Delivery < 34 Weeks
- Major Medical Complications of Delivery

NEONATAL

- Neonatal Death
- Apgar < 4 at 10”
- Transport (Transferred Out)
- Transport (Received)
- Seizures
- Preterm Infant < 34 Weeks Gestation
- Significant Birth Injury
- Assisted Ventilation / CPAP > 4 hours
- Meningitis

OTHER REVIEW CATEGORIES

MATERNAL

- Cesarean Delivery for Fetal Distress
- Cesarean Delivery for Dystocia
- Cesarean Delivery: Other Primary
- Cesarean Delivery: Repeat
- Hemorrhage, Intrapartum
- Hemorrhage, Postpartum Requiring Transfusion
- Hypertension / Preeclampsia / Eclampsia
- Diabetes: Glucose Intolerance of Pregnancy
- Diabetes: Insulin Dependent
- Midforceps / Vacuum Extraction
- Substance Abuse
- Premature Rupture of Membranes < 36 Weeks
- Prolonged Rupture of Membranes > 24 Hours at Term
- Vaginal Birth after Cesarean Section (VBAC)

NEONATAL

- Apgar < 6 at 5" or 10"
- Jaundice Requiring Exchange Transfusion
- Major Congenital Anomaly
- Meconium Aspiration Syndrome
- Neonatal Sepsis
- Neonatal Withdrawal
- Oxygen Administration > 4 Hours
- Polycythemia / Anemia
- Small for Gestational Age
- Large for Gestational Age
- Nosocomial Infection
- Transplacental Infection
- Recurring Hypoglycemia
- Macrosomia with Birth Injury

Regional Perinatal Programs of California 1997

Sample Data Set Review

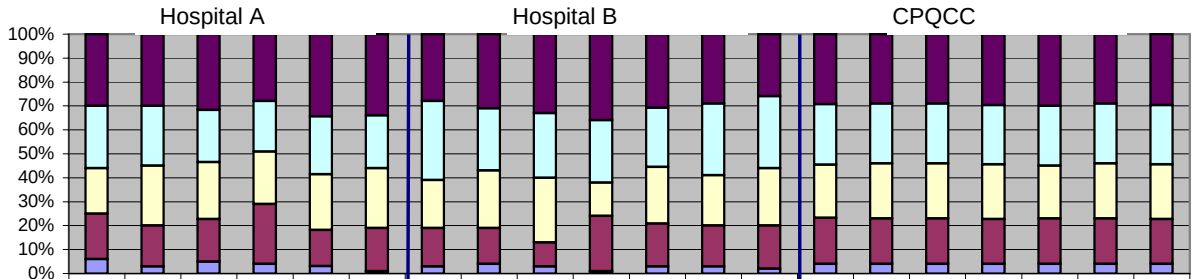
As part of the joint review of outcome data as required by standards for Regional Cooperation Agreements, the tertiary center and the contracting hospital may jointly review data. The following are sample data sets showing fictitious comparative data between two hospitals in comparison to CPQCC data. Please note that all data in the following examples has been fabricated for teaching purposes only and does not represent the data for any hospitals nor the actual CPQCC data trends in California.

Other data sets may also be used for comparative purposes. Also included in the samples is a perinatal data set collected by one health system in California. Again, the actual data is fictitious however the indicators represent actual data sets that are collected hospital-by-hospital for the Sutter system.

The following graph templates can be found on the enclosed CD:

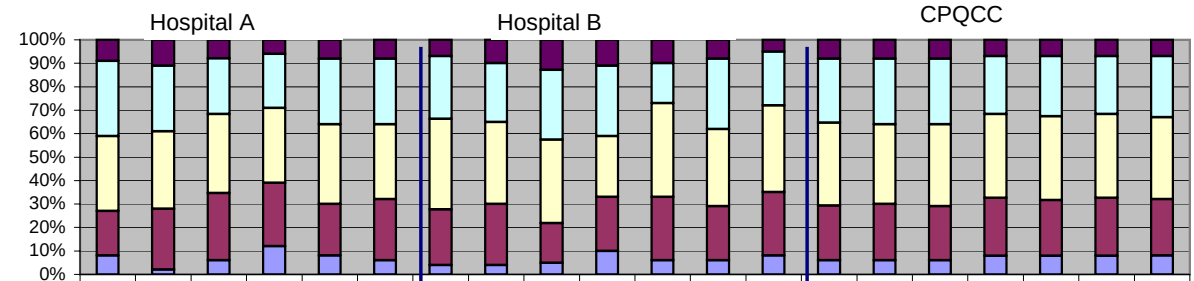
CPQCC
<1500 Gm Infants
1997-2003
Infant Characteristics

Birth Weight



	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
1251-1500g	30%	30%	32%	28%	34%	34%	28%	31%	33%	36%	31%	29%	26%	29%	29%	29%	30%	30%	29%	30%
1001-1250g	26%	25%	22%	21%	24%	22%	33%	26%	27%	26%	25%	30%	30%	25%	25%	25%	25%	25%	25%	25%
751-1000g	19%	25%	24%	22%	23%	25%	20%	24%	27%	14%	24%	21%	24%	22%	23%	23%	23%	22%	23%	23%
501-750	19%	17%	18%	25%	15%	18%	16%	15%	10%	23%	18%	17%	18%	19%	19%	19%	19%	19%	19%	19%
401-500	6%	3%	5%	4%	3%	1%	3%	4%	3%	1%	3%	3%	2%	4%	4%	4%	4%	4%	4%	4%

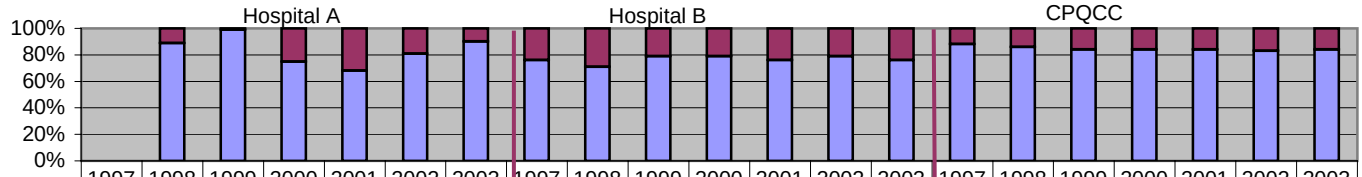
Gestational Age



	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
>32 Weeks	9%	11%	8%	6%	8%	8%	7%	10%	13%	11%	10%	8%	5%	8%	8%	8%	7%	7%	7%	7%
30-32 Weeks	32%	28%	24%	23%	28%	28%	27%	25%	30%	30%	17%	30%	23%	27%	28%	28%	25%	26%	25%	26%
27-29 Weeks	32%	33%	34%	32%	34%	32%	39%	35%	36%	26%	40%	33%	37%	35%	34%	35%	36%	36%	36%	35%
24-26 Weeks	19%	26%	29%	27%	22%	26%	24%	26%	17%	23%	27%	23%	27%	23%	24%	23%	25%	24%	25%	24%
<24 Weeks	8%	2%	6%	12%	8%	6%	4%	4%	5%	10%	6%	6%	8%	6%	6%	6%	8%	8%	8%	8%

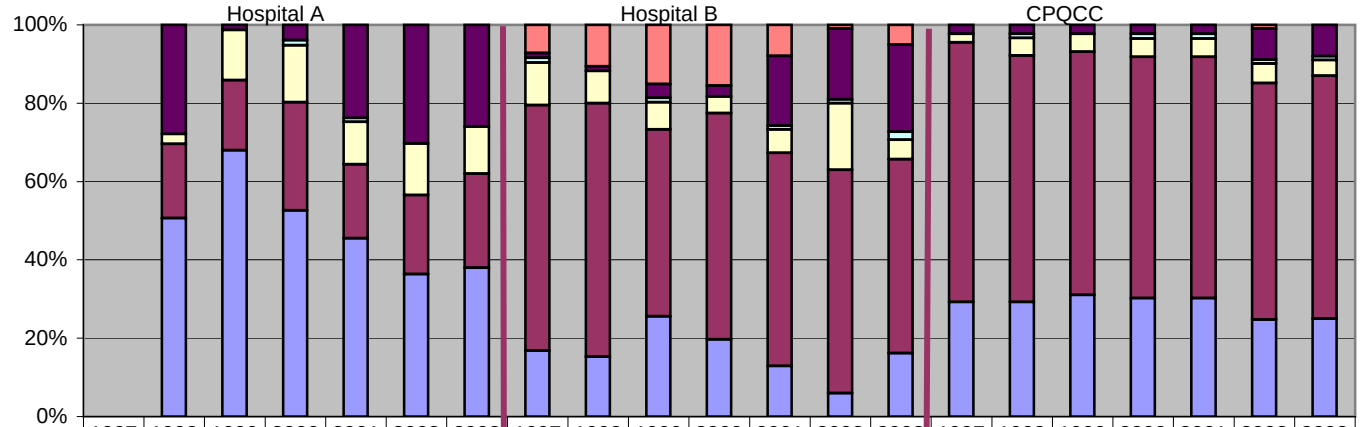
CPQCC
<=1500 Gm Infants
1997-2003
Infant Characteristics

Location of Birth (Inborn/Outborn)



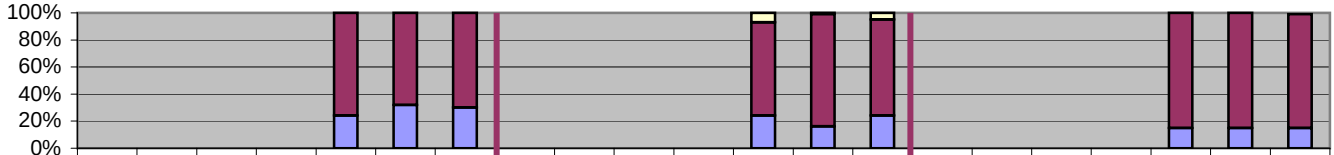
	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Outborn		11%	1%	25%	32%	19%	10%	24%	29%	21%	21%	24%	21%	24%	13%	14%	16%	16%	16%	17%	16%
Inborn		89%	99%	75%	68%	81%	90%	76%	71%	79%	79%	76%	79%	76%	97%	86%	84%	84%	84%	83%	84%

Race



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
No Data	0	0%	0%	0%	0%	0%	0%	6%	9%	13%	11%	8%	1%	5%	0%	0%	0%	0%	0%	1%	0%
Other	0	22%	1%	3%	24%	30%	26%	1%	1%	3%	2%	18%	18%	22%	2%	2%	2%	2%	2%	8%	8%
Native Am.	0	0%	0%	1%	1%	0%	0%	1%	0%	1%	0%	1%	1%	2%	0%	1%	0%	1%	1%	1%	1%
Asian	0	2%	10%	11%	11%	13%	12%	9%	7%	6%	3%	6%	17%	5%	2%	4%	4%	4%	4%	5%	4%
White	0	15%	14%	21%	19%	20%	24%	52%	55%	41%	41%	55%	57%	49%	59%	56%	54%	53%	53%	61%	62%
Black	0	40%	53%	40%	46%	36%	38%	14%	13%	22%	14%	13%	6%	16%	26%	26%	27%	26%	26%	25%	25%

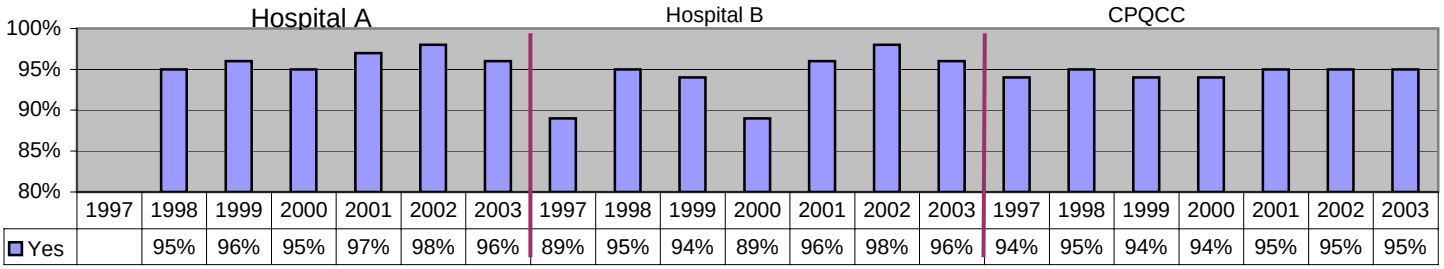
Ethnicity



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Missing Ethnicity	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	1%	5%	0%	0%	0%	0%	0%	0%	0%
Not Hispanic	0%	0%	0%	0%	76%	68%	70%	0%	0%	0%	0%	69%	83%	71%	0%	0%	0%	0%	85%	85%	84%
Hispanic	0%	0%	0%	0%	24%	32%	30%	0%	0%	0%	0%	24%	16%	24%	0%	0%	0%	0%	15%	15%	15%

CPQCC
<=1500 Gm Infants
1997-2003
Obstetrical Characteristics

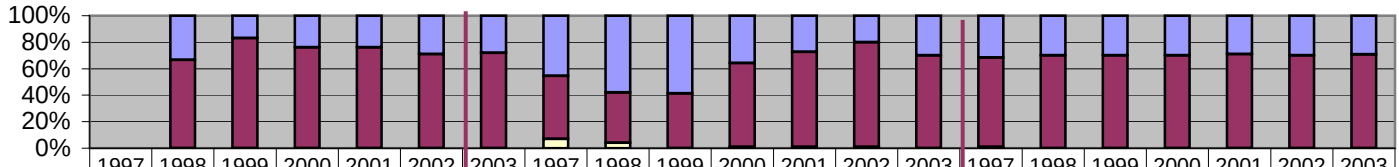
Received Prenatal Care



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Yes		95%	96%	95%	97%	98%	96%	89%	95%	94%	89%	96%	98%	96%	94%	95%	94%	94%	95%	95%	95%

Prenatal Care: Mother received any prenatal obstetrical care prior to the admission during which the birth occurred

Received Antenatal Steroids



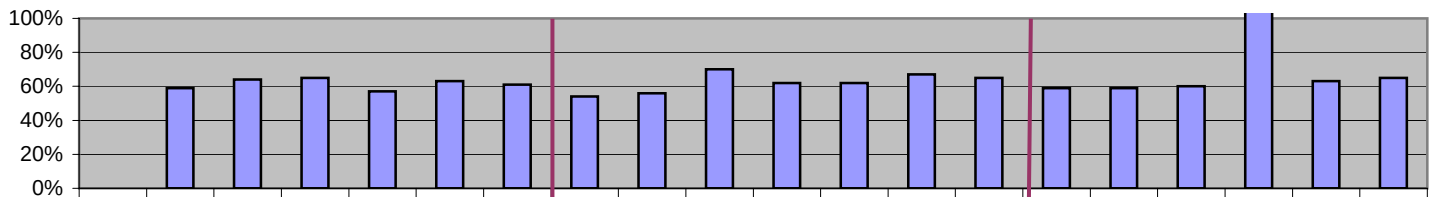
	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
No		33%	17%	24%	24%	29%	28%	45%	58%	58%	36%	27%	20%	30%	32%	30%	30%	30%	29%	30%	29%
Yes		66%	83%	76%	76%	71%	72%	47%	38%	41%	64%	71%	79%	70%	68%	70%	70%	70%	71%	70%	70%
No Data		0%	0%	0%	0%	0%	0%	7%	4%	0%	1%	1%	1%	0%	1%	0%	0%	0%	0%	0%	0%

None: No corticosteroids administered prior to delivery

Partial: delivery occurred less than 24 hours after first dose or more than one week after the last dose of corticosteroids

Complete: delivery occurred more than 24 hours and less than 1 week after a dose of corticosteroids.

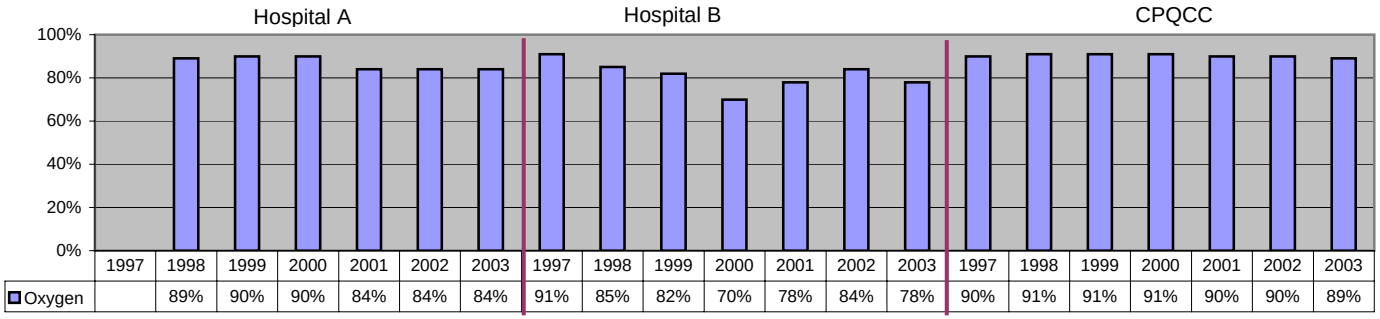
Delivered by Cesarean Section



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002
Yes		59%	64%	65%	57%	63%	61%	54%	56%	70%	62%	62%	67%	65%	59%	59%	60%	61	63%	65%

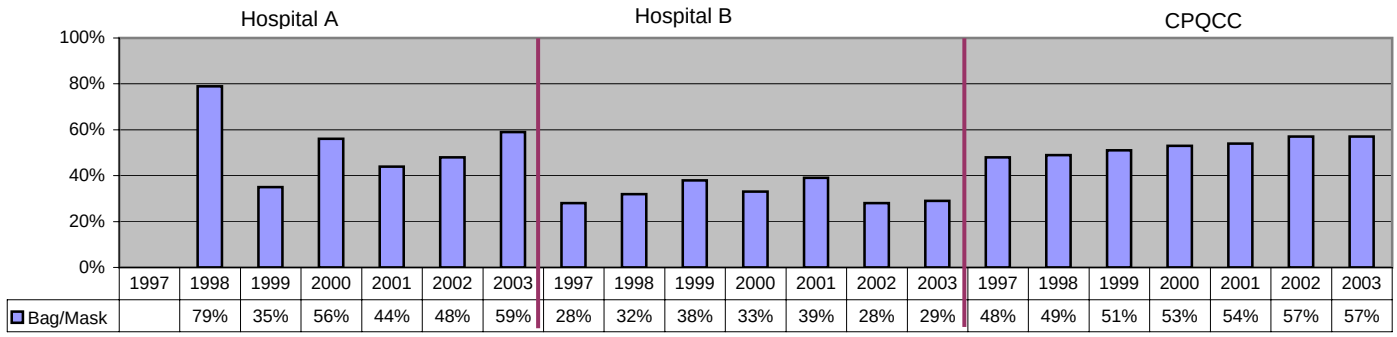
CPQCC
<=1500 Gm Infants
1997-2003
Delivery Room Resuscitation

Oxygen



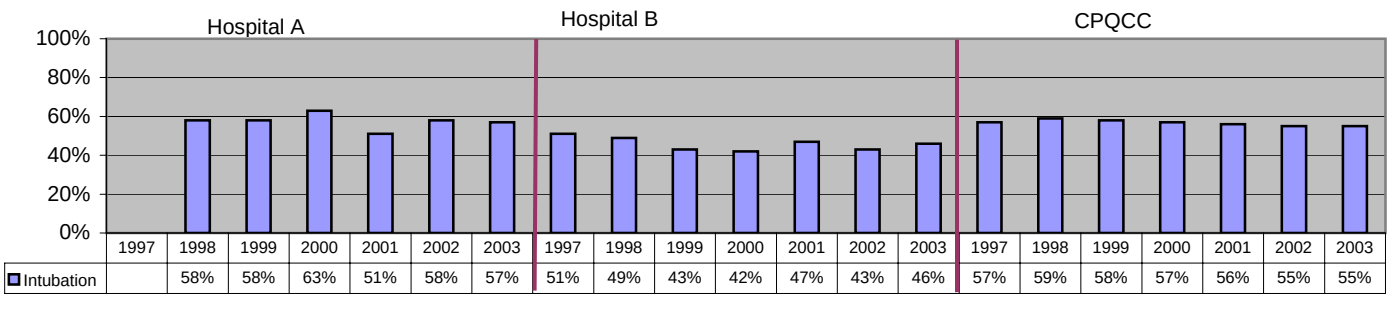
	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Oxygen		89%	90%	90%	84%	84%	84%	91%	85%	82%	70%	78%	84%	78%	90%	91%	91%	91%	90%	90%	89%

Bag & Mask



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Bag/Mask		79%	35%	56%	44%	48%	59%	28%	32%	38%	33%	39%	28%	29%	48%	49%	51%	53%	54%	57%	57%

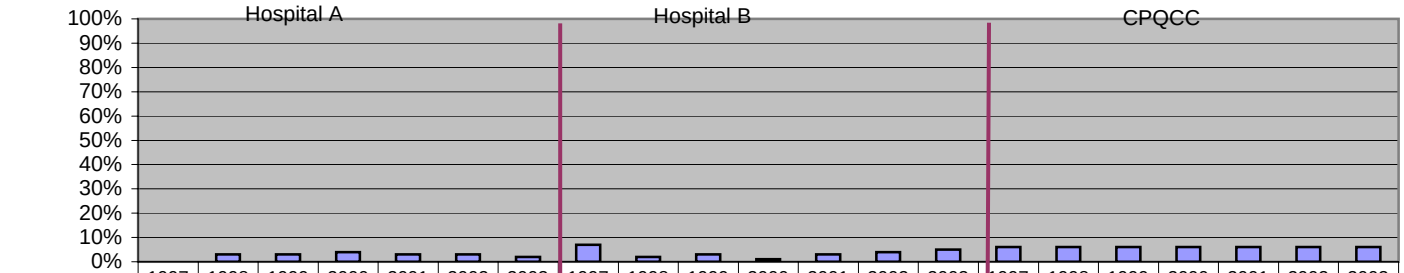
Intubation



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Intubation		58%	58%	63%	51%	58%	57%	51%	49%	43%	42%	47%	43%	46%	57%	59%	58%	57%	56%	55%	55%

CPQCC
<=1500 Gm Infants
1997-2003
Delivery Room Resuscitation

Cardiac Compression

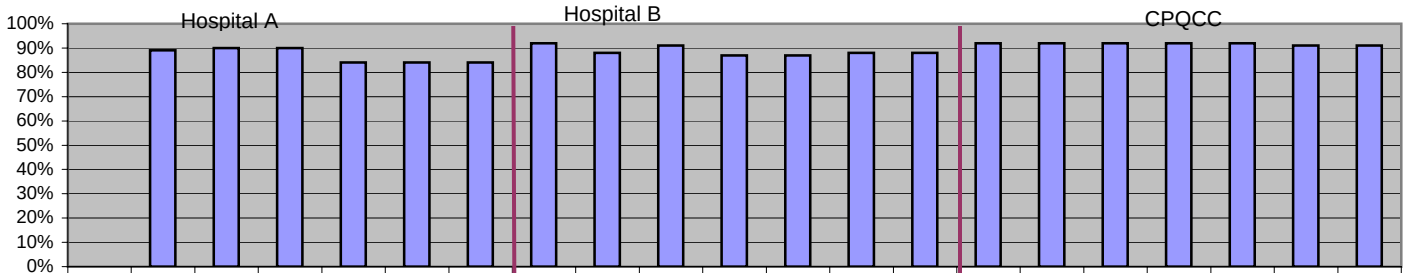


	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Card.Comp.		3%	3%	4%	3%	3%	2%	7%	2%	3%	1%	3%	4%	5%	6%	6%	6%	6%	6%	6%	6%

Epinephrine

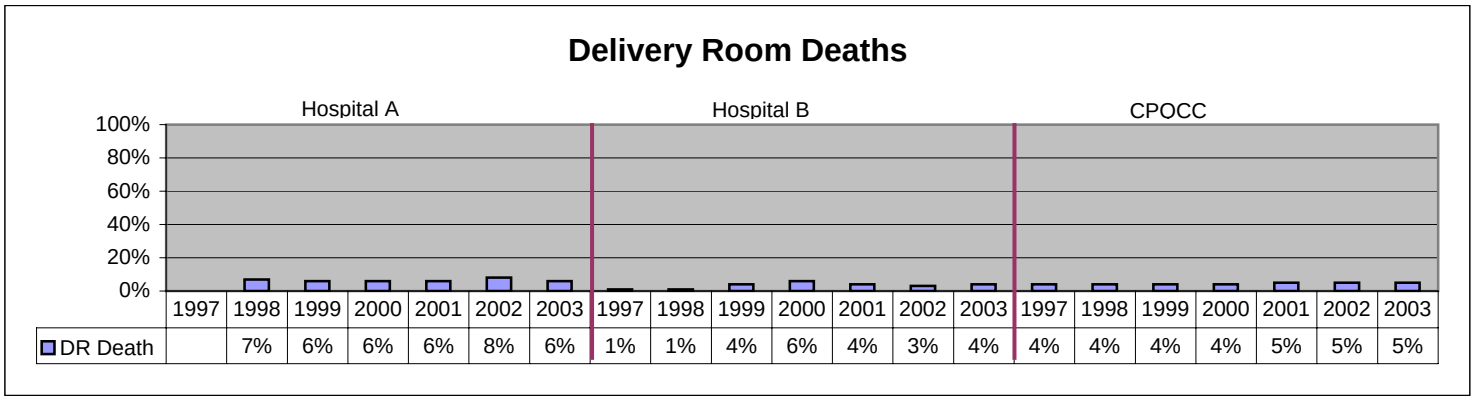
	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Epinephrine		2%	2%	4%	2%	2%	2%	5%	2%	2%	1%	1%	1%	0%	5%	5%	5%	4%	4%	4%	4%

Any Resuscitation



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Any		89%	90%	90%	84%	84%	84%	92%	88%	91%	87%	87%	88%	88%	92%	92%	92%	92%	92%	91%	91%

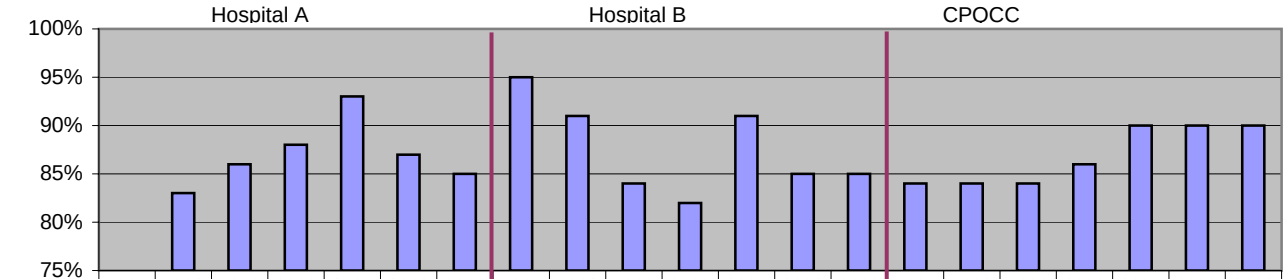
CPQCC
<=1500 Gm Infants
1997-2003



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
DR Death		7%	6%	6%	6%	8%	6%	1%	1%	4%	6%	4%	3%	4%	4%	4%	4%	4%	5%	5%	5%

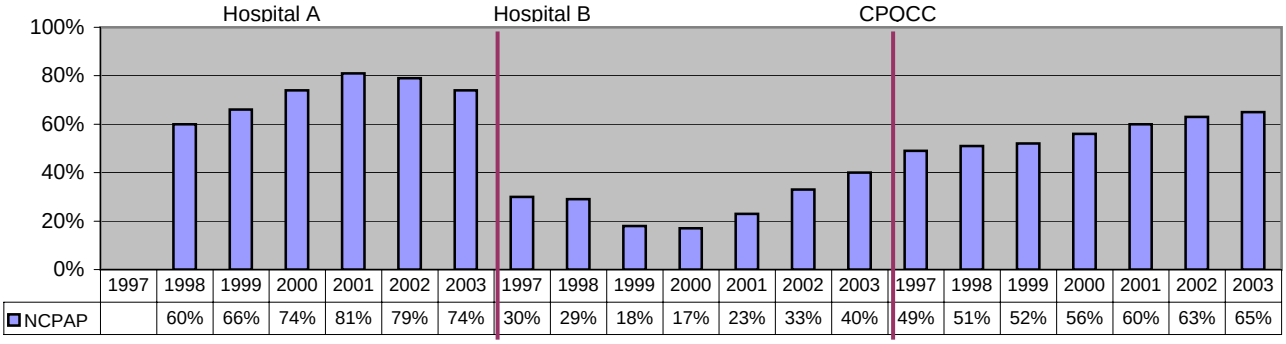
CPQCC
<=1500 Gm Infants
1997-2003
Respiratory Support Interventions

Oxygen



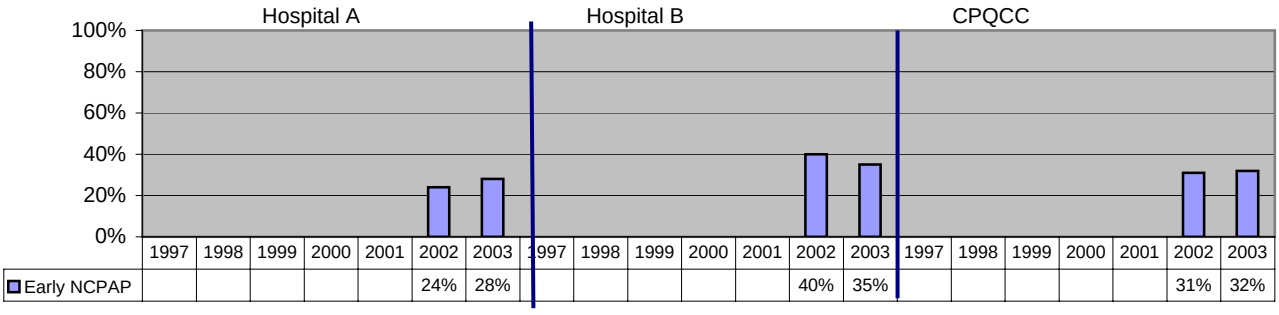
	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Oxygen		83%	86%	88%	93%	87%	85%	95%	91%	84%	82%	91%	85%	85%	84%	84%	84%	86%	90%	90%	90%

Nasal CPAP



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
NCPAP		60%	66%	74%	81%	79%	74%	30%	29%	18%	17%	23%	33%	40%	49%	51%	52%	56%	60%	63%	65%

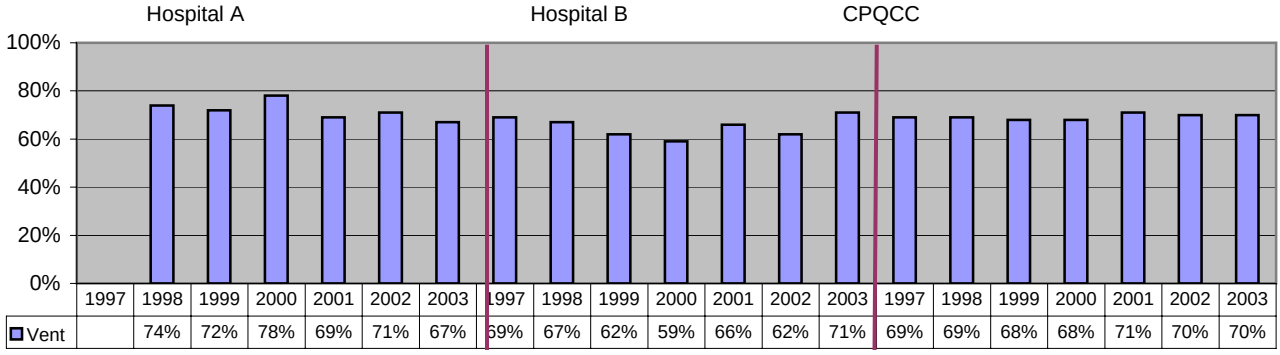
Early NCPAP



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Early NCPAP						24%	28%						40%	35%						31%	32%

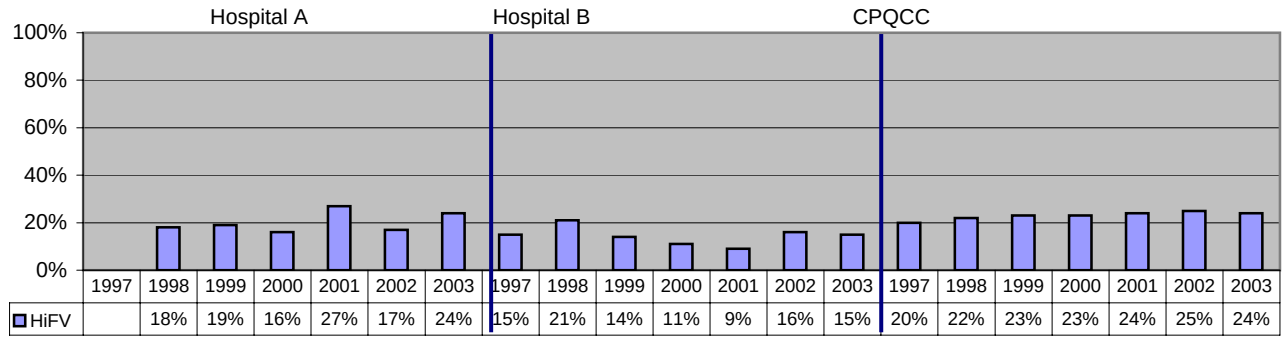
CPQCC
<=1500 Gm Infants
1997-2003
Respiratory Support Interventions

Conventional Ventilation



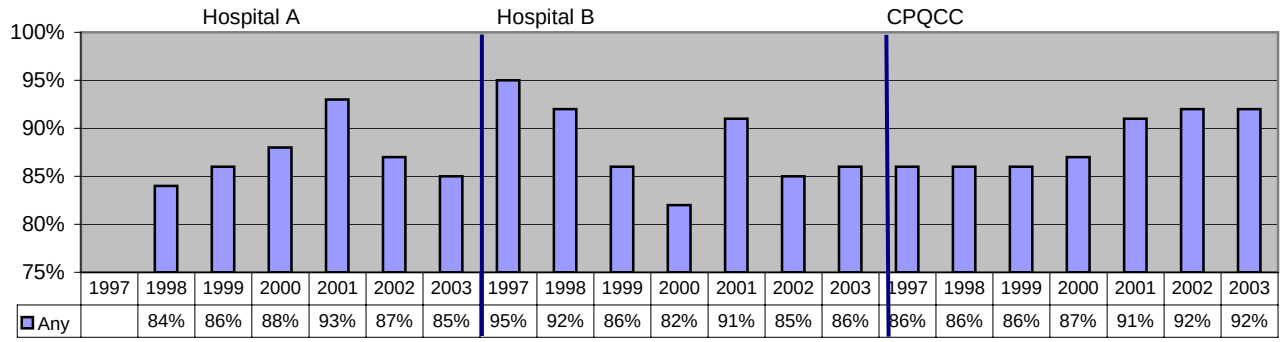
	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Vent		74%	72%	78%	69%	71%	67%	69%	67%	62%	59%	66%	62%	71%	69%	69%	68%	68%	71%	70%	70%

High Frequency Ventilation



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
HiFV		18%	19%	16%	27%	17%	24%	15%	21%	14%	11%	9%	16%	15%	20%	22%	23%	23%	24%	25%	24%

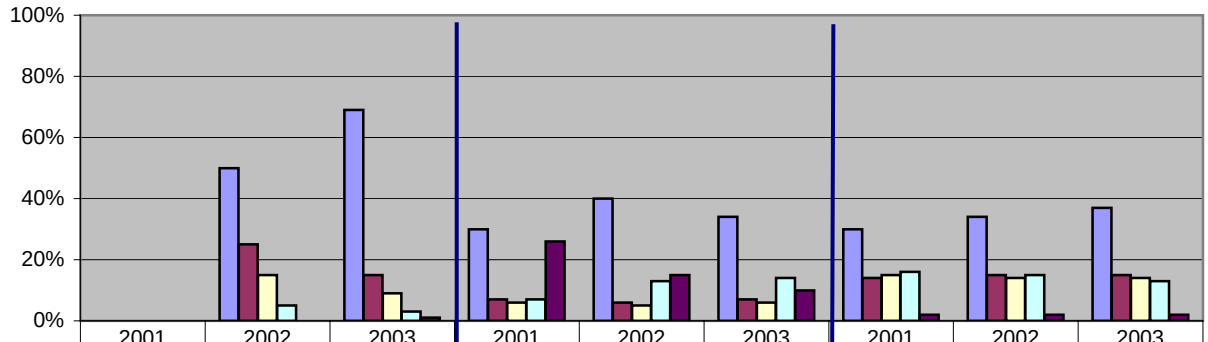
Any Respiratory Support



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Any		84%	86%	88%	93%	87%	85%	95%	92%	86%	82%	91%	85%	86%	86%	86%	86%	87%	91%	92%	92%

CPQCC
<=1500 Gm Infants
1997-2003
Interventions and Outcomes

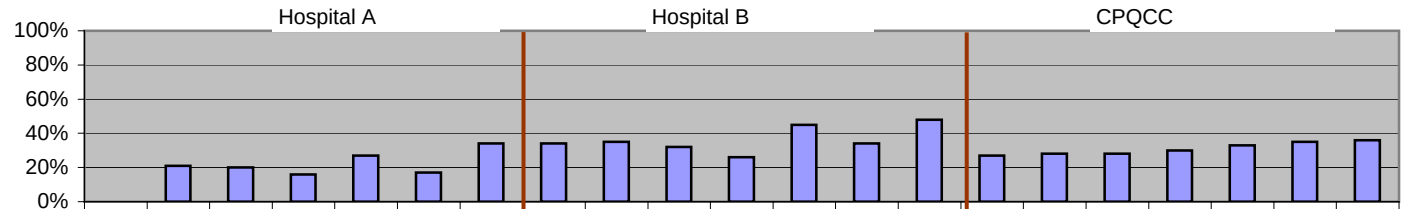
Time to 1st Dose of Surfactant



	2001	2002	2003	2001	2002	2003	2001	2002	2003
15 or less		50%	69%	30%	40%	34%	30%	34%	37%
16 - 30		25%	15%	7%	6%	7%	14%	15%	15%
31 - 60		15%	9%	6%	5%	6%	15%	14%	14%
61 - 120		5%	3%	7%	13%	14%	16%	15%	13%
Time Missing		0%	1%	26%	15%	10%	2%	2%	2%

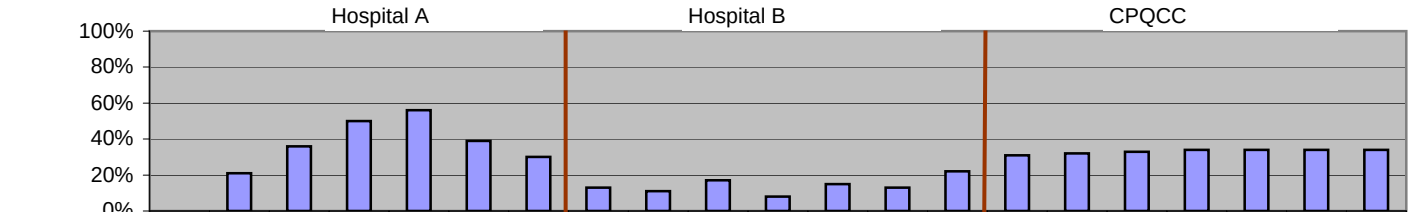
CPQCC
<=1500 Gm Infants
1997-2003
Interventions Outcomes

Percentage of Infants with PDA



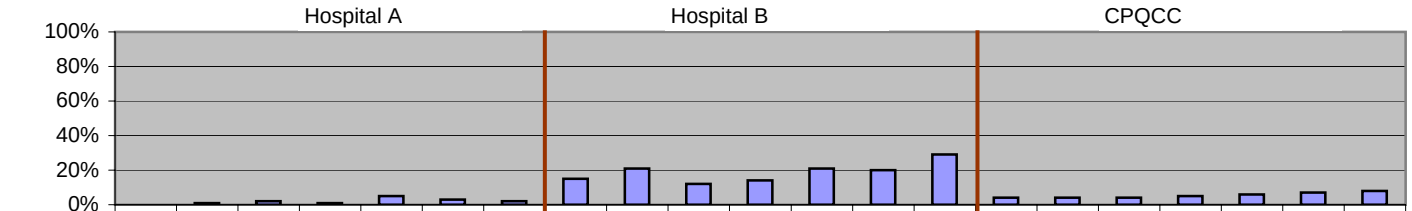
	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
PDA		21%	20%	16%	27%	17%	34%	34%	35%	32%	26%	45%	34%	48%	27%	28%	28%	30%	33%	35%	36%

Percentage of Infants Receiving Indomethacin



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Indomethacin		21%	36%	50%	56%	39%	30%	13%	11%	17%	8%	15%	13%	22%	31%	32%	33%	34%	34%	34%	34%

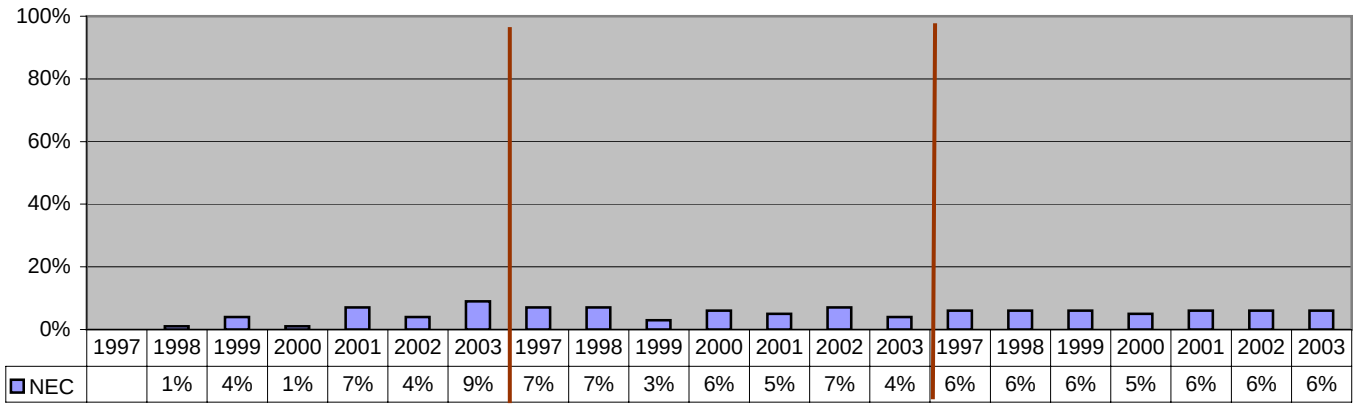
Percentage of Infants with PDA Ligation



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Ligation		1%	2%	1%	5%	3%	2%	15%	21%	12%	14%	21%	20%	29%	4%	4%	4%	5%	6%	7%	8%

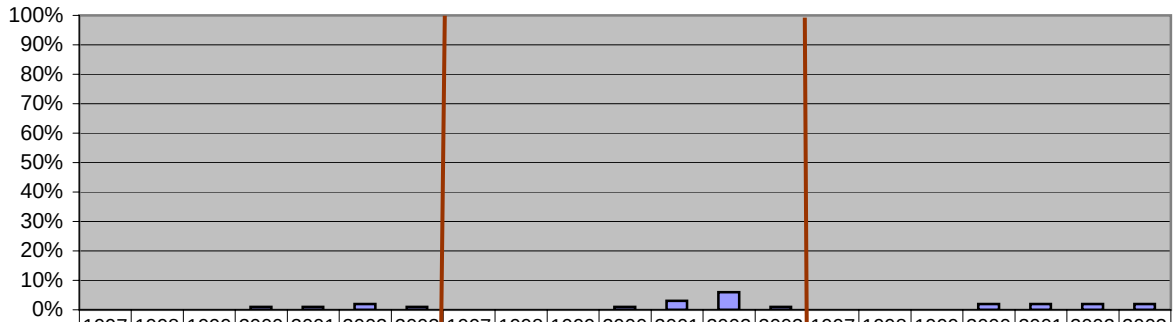
CPQCC
<=1500 Gm Infants
1997-2003
Interventions Outcomes

Necrotizing Enterocolitis



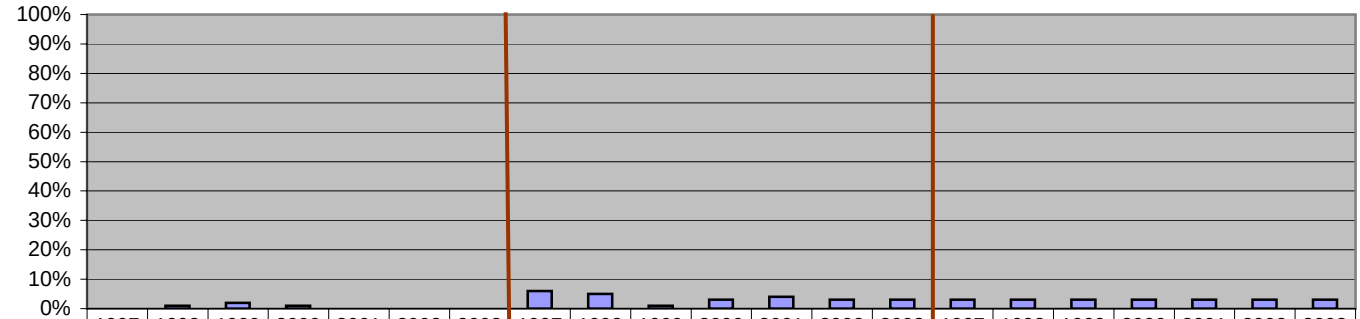
	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
NEC		1%	4%	1%	7%	4%	9%	7%	7%	3%	6%	5%	7%	4%	6%	6%	6%	5%	6%	6%	6%

Gastrointestinal Perforation



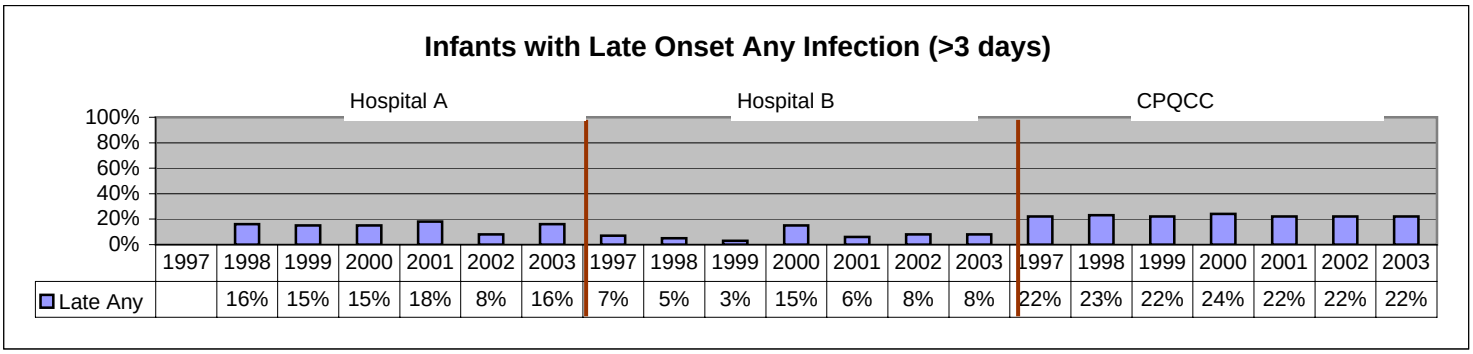
	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Gastrointestinal Perforation				1%	1%	2%	1%				1%	3%	6%	1%				2%	2%	2%	2%

NEC Surgery



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Surgery		1%	2%	1%	0%	0%	0%	6%	5%	1%	3%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%

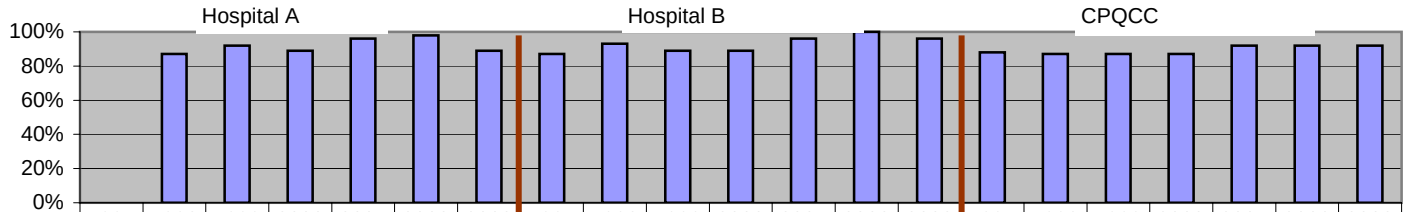
CPQCC
<=1500 Gm Infants
1997-2003
Outcomes



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Late Any		16%	15%	15%	18%	8%	16%	7%	5%	3%	15%	6%	8%	8%	22%	23%	22%	24%	22%	22%	22%

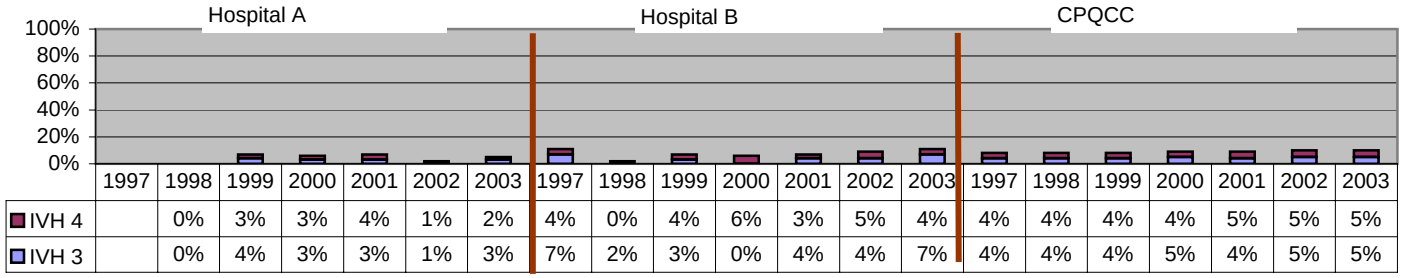
CPQCC
<=1500 Gm Infants
1997-2003
Interventions and Outcomes

Percentage of Infants Receiving a Cranial Ultrasound



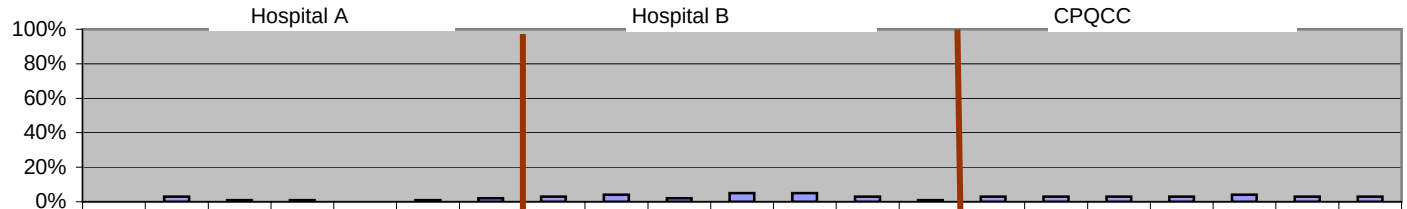
	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
US		87%	92%	89%	96%	98%	89%	87%	93%	89%	89%	96%	100%	96%	88%	87%	87%	87%	92%	92%	92%

Percentage of Infants with Grade 3-4 IVH



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
IVH 4		0%	3%	3%	4%	1%	2%	4%	0%	4%	6%	3%	5%	4%	4%	4%	4%	4%	5%	5%	5%
IVH 3		0%	4%	3%	3%	1%	3%	7%	2%	3%	0%	4%	4%	7%	4%	4%	4%	5%	4%	5%	5%

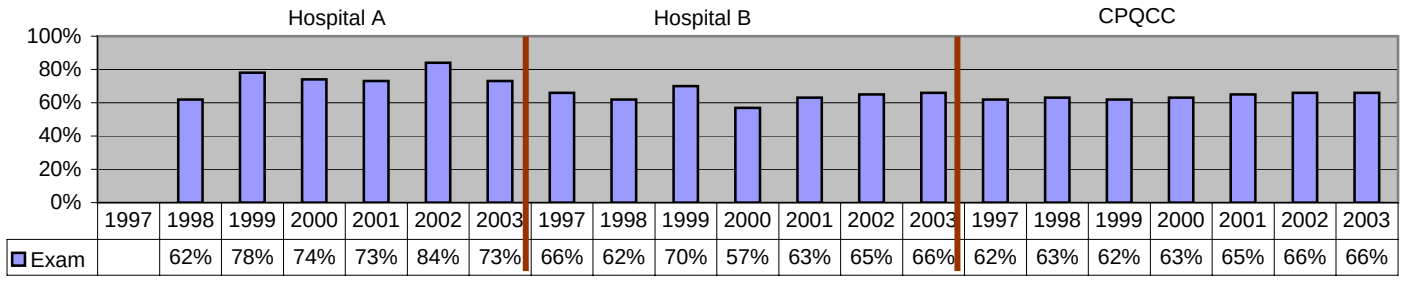
Percentage of Infants with Cystic PVL



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
PVL		3%	1%	1%	0%	1%	2%	3%	4%	2%	5%	5%	3%	1%	3%	3%	3%	3%	4%	3%	3%

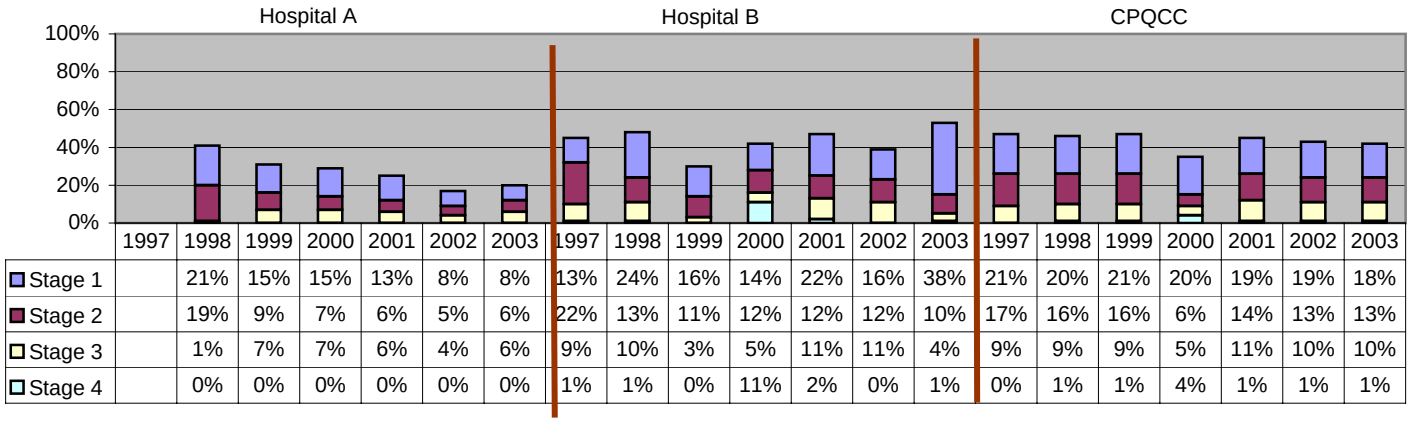
CPQCC
<=1500 Gm Infants
1997-2003
Interventions and Outcomes

Percentage of Infants Receiving an Eye Exam



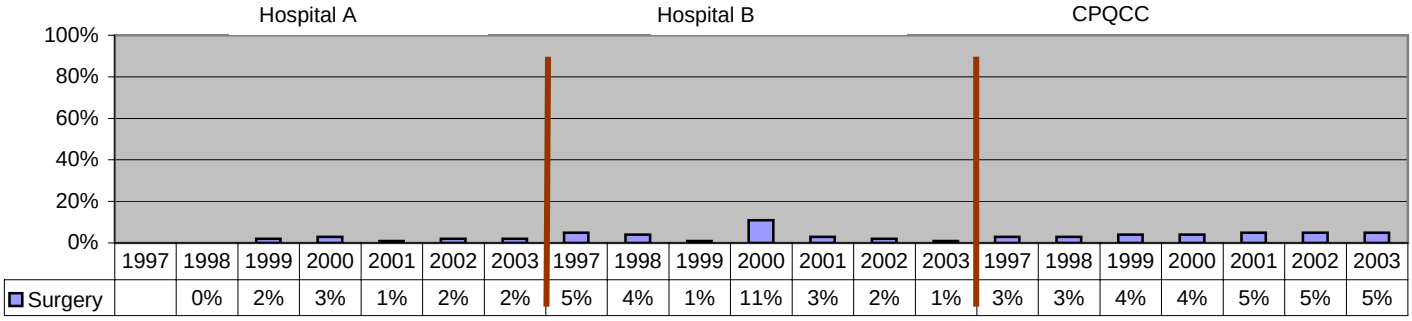
	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Exam		62%	78%	74%	73%	84%	73%	66%	62%	70%	57%	63%	65%	66%	62%	63%	62%	63%	65%	66%	66%

Percentage of Infants with ROP by Stage



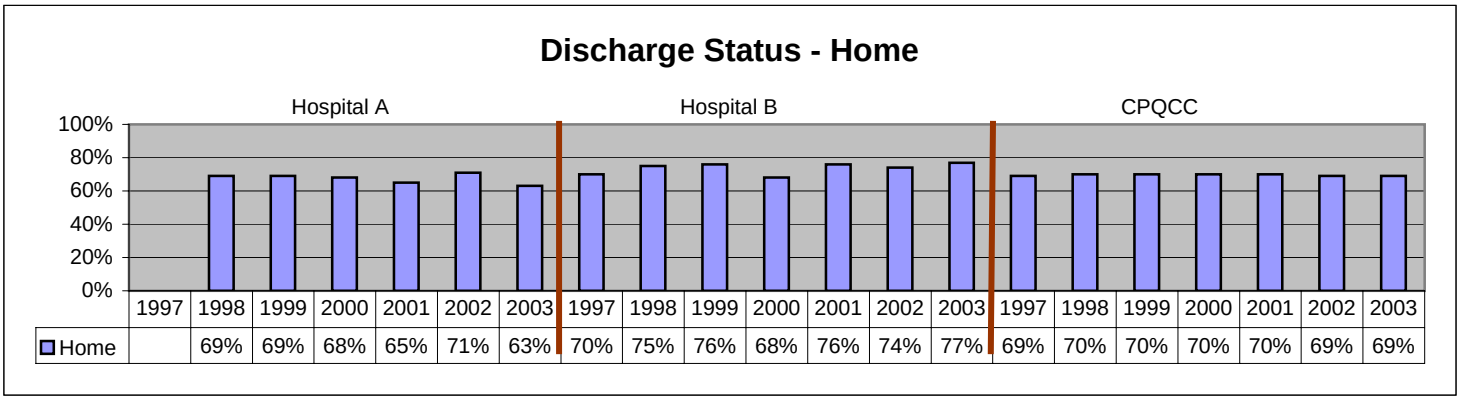
	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Stage 1		21%	15%	15%	13%	8%	8%	13%	24%	16%	14%	22%	16%	38%	21%	20%	21%	20%	19%	19%	18%
Stage 2		19%	9%	7%	6%	5%	6%	22%	13%	11%	12%	12%	12%	10%	17%	16%	16%	6%	14%	13%	13%
Stage 3		1%	7%	7%	6%	4%	6%	9%	10%	3%	5%	11%	11%	4%	9%	9%	9%	5%	11%	10%	10%
Stage 4		0%	0%	0%	0%	0%	0%	1%	1%	0%	11%	2%	0%	1%	0%	1%	1%	4%	1%	1%	1%

Percentage of Patients Receiving ROP Surgery

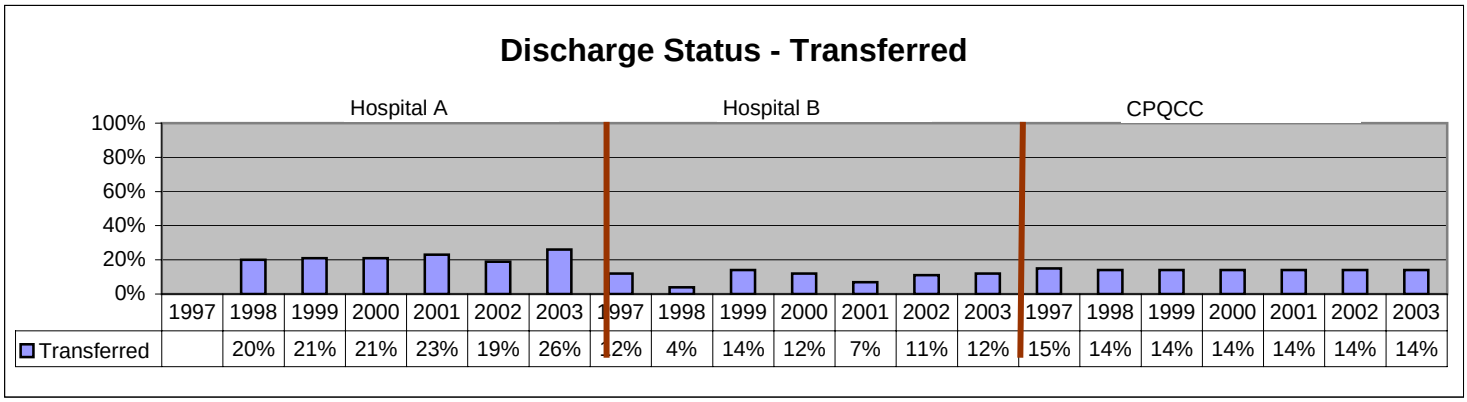


	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Surgery		0%	2%	3%	1%	2%	2%	5%	4%	1%	11%	3%	2%	1%	3%	3%	4%	4%	5%	5%	5%

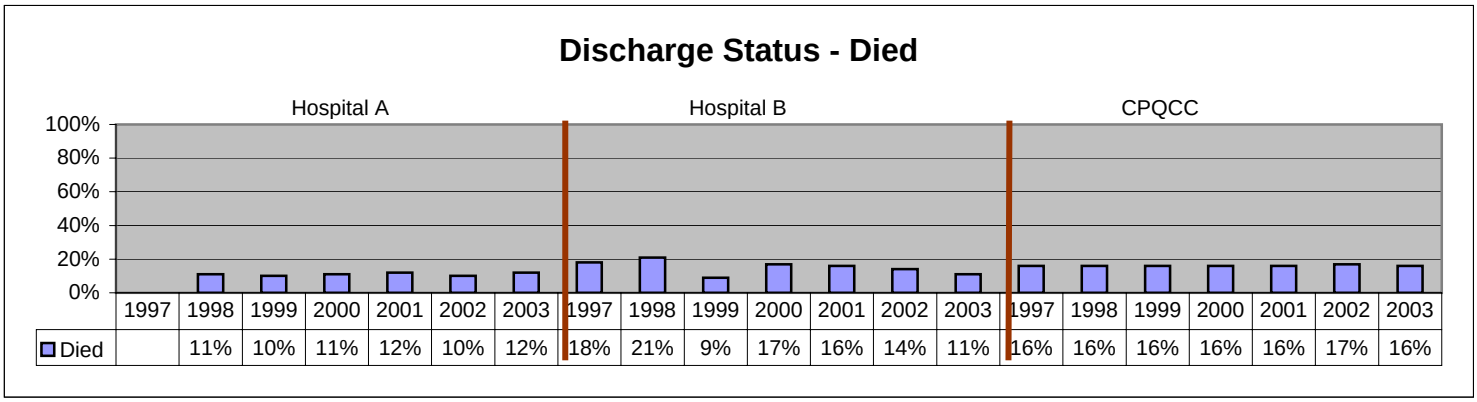
CPQCC
<=1500 Gm Infants
1997-2003
Discharge Status



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Home		69%	69%	68%	65%	71%	63%	70%	75%	76%	68%	76%	74%	77%	69%	70%	70%	70%	70%	69%	69%



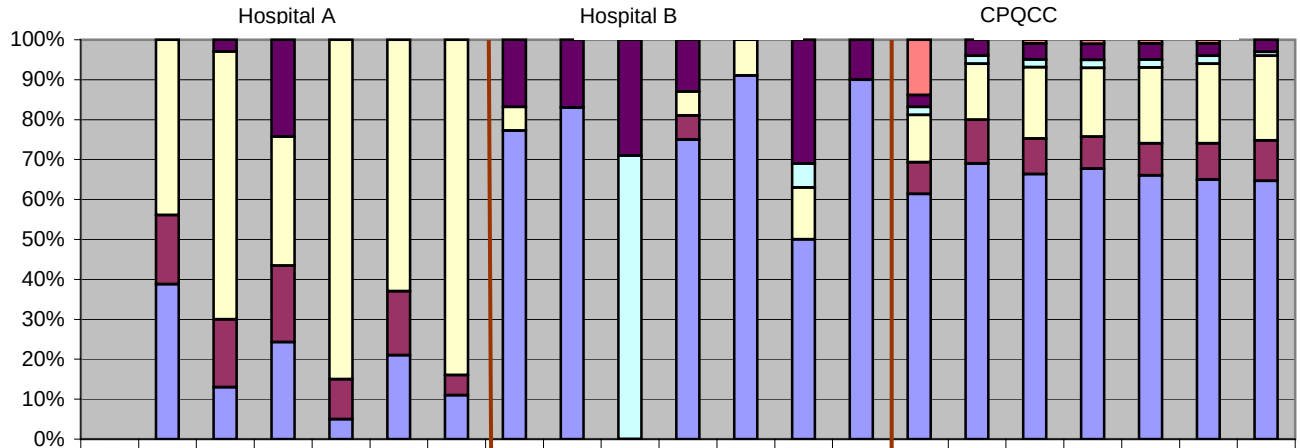
	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Transferred		20%	21%	21%	23%	19%	26%	12%	4%	14%	12%	7%	11%	12%	15%	14%	14%	14%	14%	14%	14%



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Died		11%	10%	11%	12%	10%	12%	18%	21%	9%	17%	16%	14%	11%	16%	16%	16%	16%	16%	17%	16%

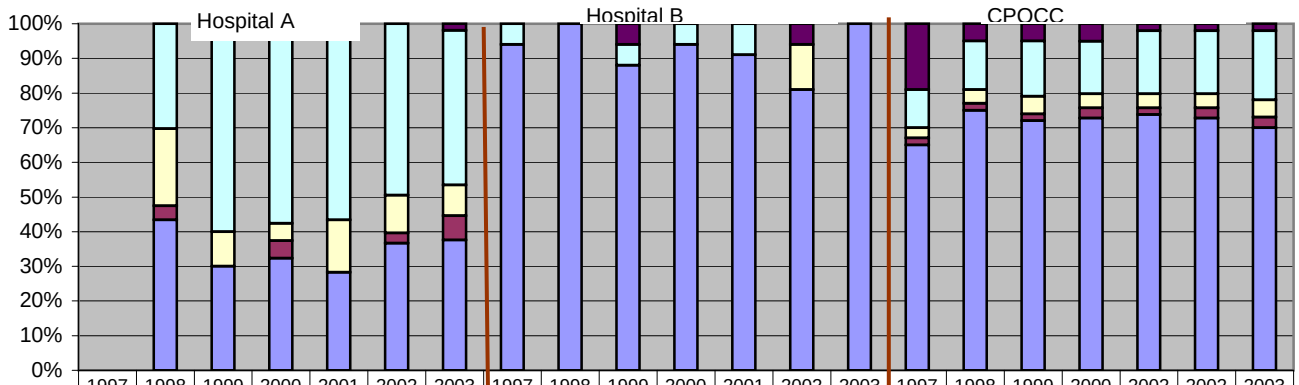
CPQCC
<=1500 Gm Infants
1997-2003
Reason For Transfer

Reason for Transfer



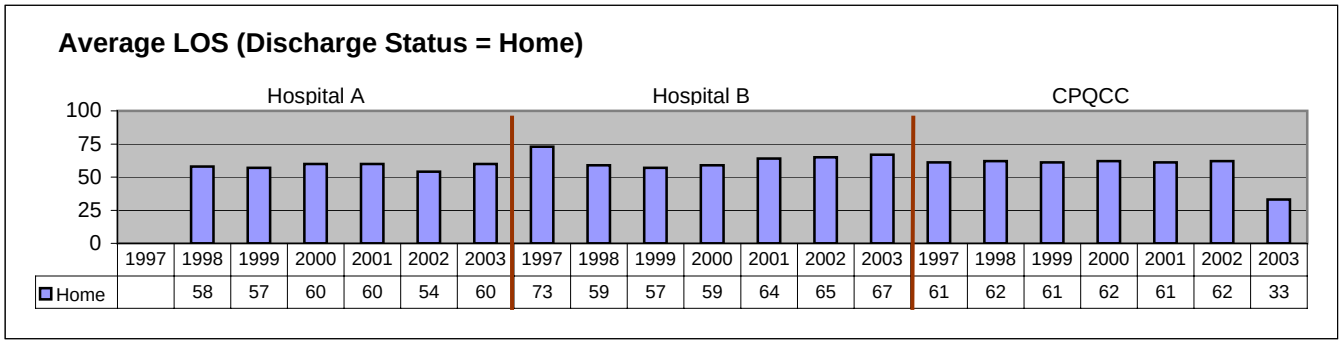
	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
No Data		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	14%	0%	1%	1%	1%	1%	0%
Other		0%	3%	24%	0%	0%	0%	17%	17%	29%	13%	0%	31%	10%	3%	4%	4%	4%	4%	3%	3%
Chronic Care		0%	0%	0%	0%	0%	0%	0%	0%	71%	0%	0%	6%	0%	2%	2%	2%	2%	2%	2%	1%
Surgery		43%	67%	32%	85%	63%	84%	6%	0%	0%	6%	9%	13%	0%	12%	14%	18%	17%	19%	20%	21%
Medical/Diagnostic		17%	17%	19%	10%	16%	5%	0%	0%	0%	6%	0%	0%	0%	8%	11%	9%	8%	8%	9%	10%
Growth		38%	13%	24%	5%	21%	11%	78%	83%	0%	75%	91%	50%	90%	62%	69%	67%	67%	66%	65%	64%

Status of Transfers

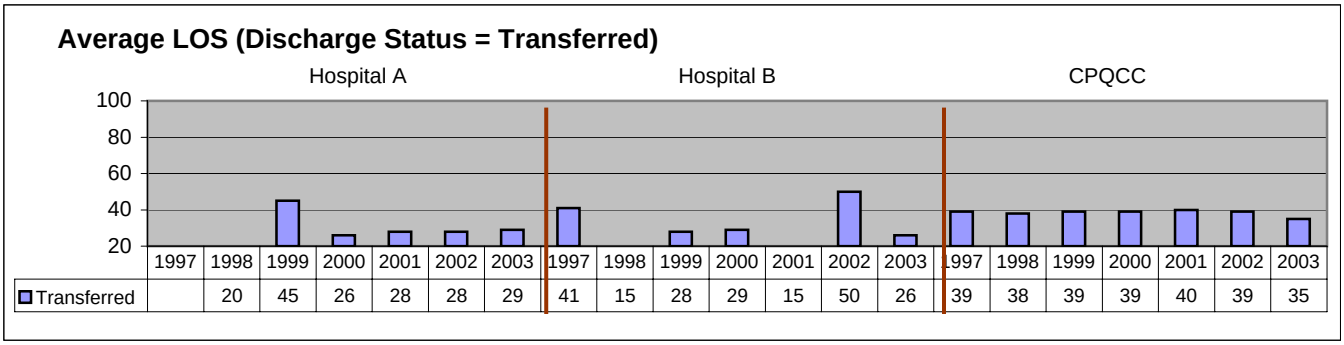


	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2002	2002	2003
No Data		0%	3%	0%	3%	0%	2%	0%	0%	6%	0%	0%	6%	0%	19%	5%	5%	5%	2%	2%	2%
Readmitted		30%	57%	57%	53%	50%	45%	6%	0%	6%	6%	9%	0%	0%	11%	14%	16%	15%	18%	18%	20%
Died		22%	10%	5%	15%	11%	9%	0%	0%	0%	0%	0%	13%	0%	3%	4%	5%	4%	4%	4%	5%
Transferred Again		4%	0%	5%	0%	3%	7%	0%	0%	0%	0%	0%	0%	0%	2%	2%	2%	3%	2%	3%	3%
Home		43%	30%	32%	28%	37%	38%	94%	100%	88%	94%	91%	81%	100%	65%	75%	72%	72%	73%	72%	70%

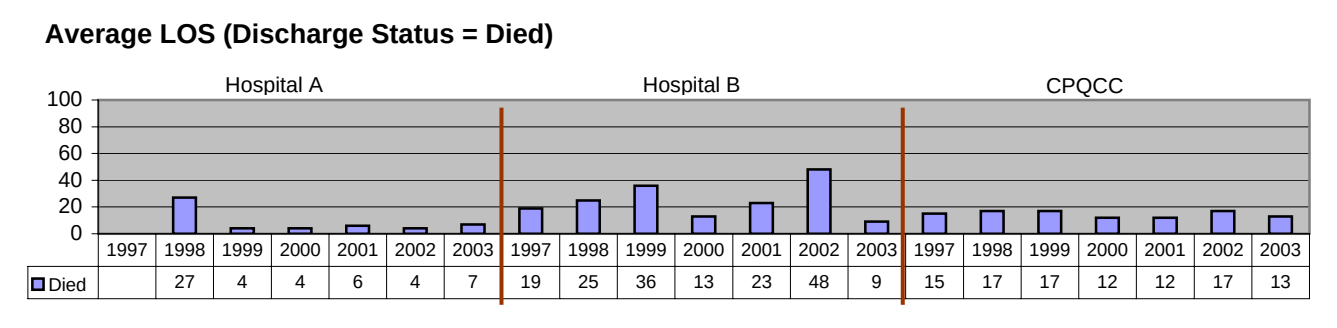
CPQCC
<=1500 Gm Infants
1997-2003
Mean LOS by Discharge Status



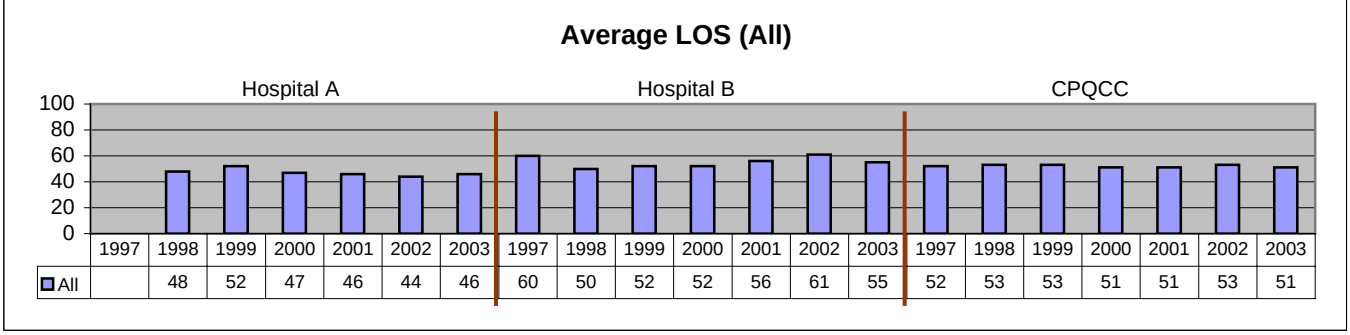
	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Home		58	57	60	60	54	60	73	59	57	59	64	65	67	61	62	61	62	61	62	33



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Transferred		20	45	26	28	28	29	41	15	28	29	15	50	26	39	38	39	39	40	39	35



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
Died		27	4	4	6	4	7	19	25	36	13	23	48	9	15	17	17	12	12	17	13



	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003	1997	1998	1999	2000	2001	2002	2003
All		48	52	47	46	44	46	60	50	52	52	56	61	55	52	53	53	51	51	53	51

Sutter Women's &
Children's Services

Sutter Health

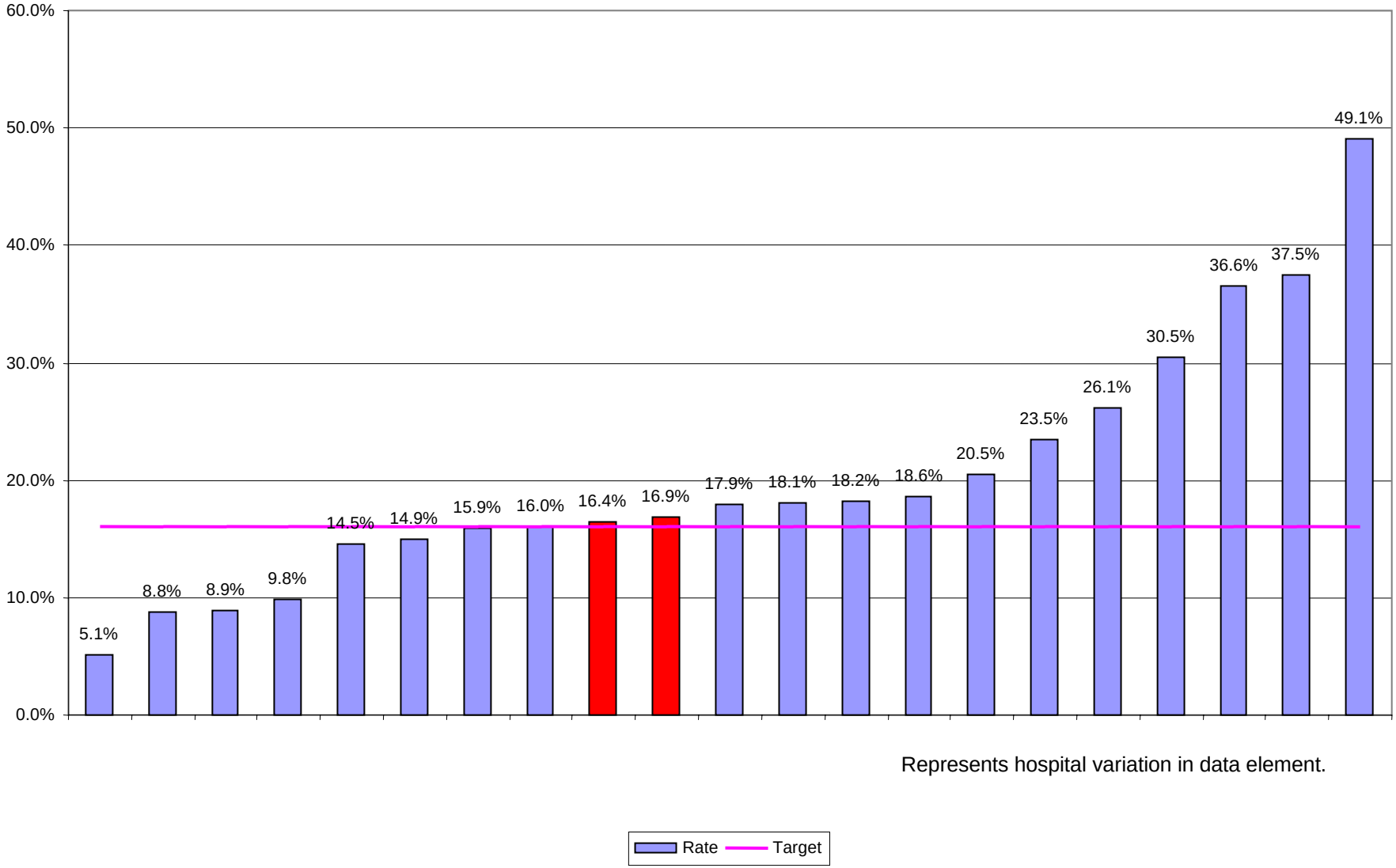
First Pregnancy

and Delivery

Clinical Initiative

Resources

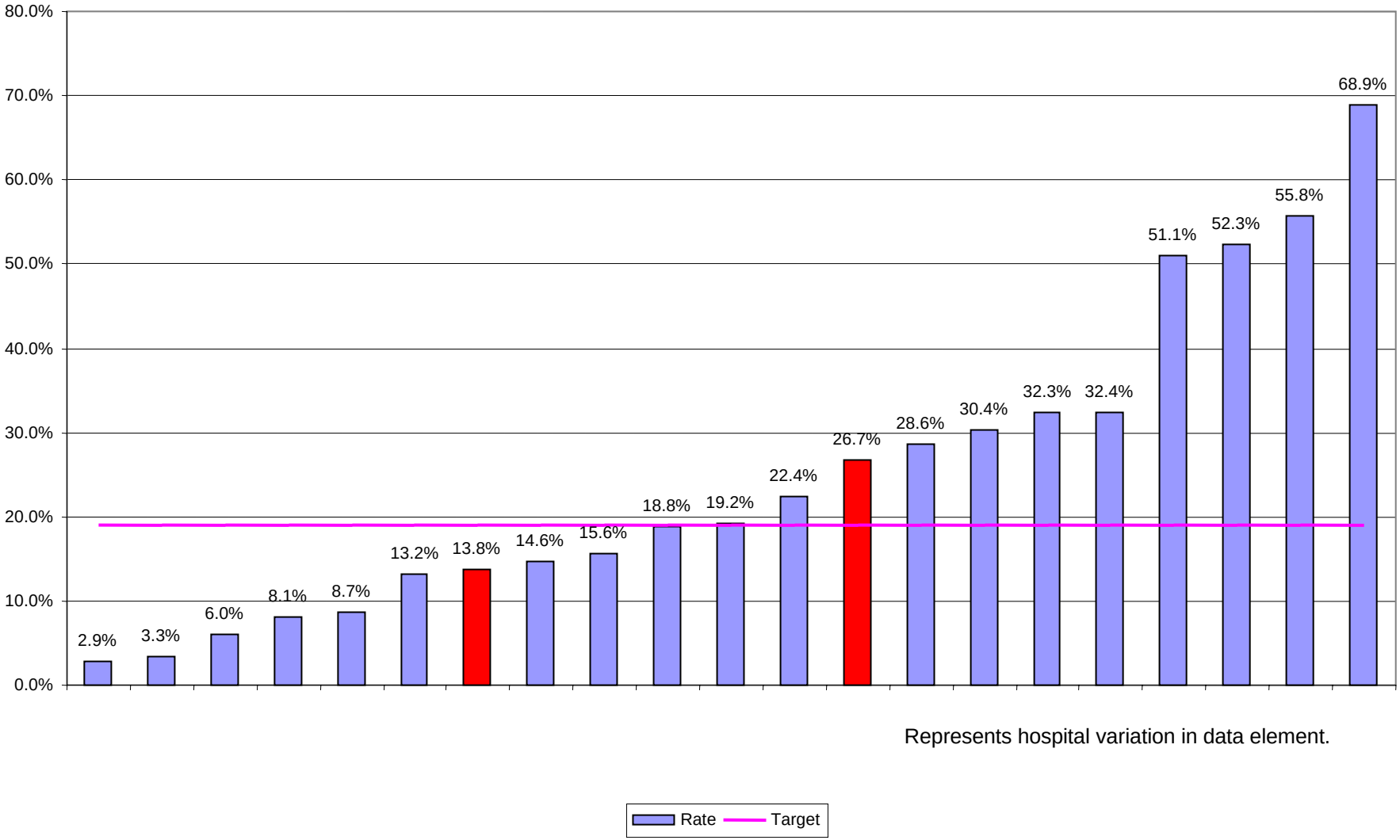
First Pregnancy and Delivery, 2004
NTSV Induced Labor, 37.0--40.6 Weeks; Target <=16%



Represents hospital variation in data element.

3/8/2007

First Pregnancy and Delivery, 2004
NTSV Episiotomy Rate (Vaginal Deliveries); Target <= 19%



Represents hospital variation in data element.

3/8/2007

FPAD Measures Summary

FPAD Mission: We seek to improve both the quality of the experience and the quality of mother/baby outcomes for our mothers' first pregnancies through education, research and enhanced care. (No goal statement developed)
Target Setting Philosophy:

Measure	Literature Citation	Numerator Definition / Denominator Definition	Baseline	External Benchmark	Target	Target Rationale
1 Cervical Dilation < 3 cm on Decision to Admit, (Excluding Inductions)	See attached table	NTSV patients with dilation < 3cm upon decision for admission and excluding inductions and women with no exams performed. / NTSV births excluding inductions and women with no exams.	No pre-existing baseline data	None	< = 29%	75th percentile 2001 full year internal benchmark. *Re-validated in 2003*
2 Induction, 37-41 Weeks	See attached table	NTSV births (>=37and <41 weeks gestation) whose labor was induced by any method and for any indication. / NTSV births (>=37and <41 weeks gestation)	No pre-existing baseline data	None	<=16%	75th percentile 2001 full year internal benchmark. *Re-validated in 2003*
3. Episiotomy	See attached table	NTSV vaginal births with episiotomies / NTSV vaginal births	No pre-existing baseline data	None	<= 19%	75th percentile 2001 full year internal benchmark. *Re-validated in 2003*
4 NTSV Cesarean Birth Rate	See attached table	NTSV cesarean births / NTSV births	No pre-existing baseline data	External National Benchmark <= 15.5%	<= 15.5%	
5 3rd/4th Degree Laceration	See attached table	NTSV vaginal births with 3rd or 4th degree perineal lacerations / NTSV vaginal births	No pre-existing baseline data	None	<= 6%	75th percentile 2001 full year internal benchmark *Re-validated in 2003*

Targets Approved by Committee: <insert date>
Targets Approved by CLC: < insert date>
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FPAD Measures Summary

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Target Setting Philosophy:

Measure	Literature Citation	Numerator Definition / Denominator Definition	Baseline	External Benchmark	Target	Target Rationale
6. Low 5-Minute Apgar Score per Thousand		NTSV births with 5' Apgar<7 (including 0, and stillbirths) / NTSV births	No pre-existing baseline data		<= 8 per Thousand	75th percentile 2001 full year internal benchmark
7. Patient Satisfaction of OB unit discharges		Press Ganey – OB patients first birth only Standard overall mean X recommend top box. / N/A	None	None	=> 72.8	75th percentile of internal benchmark *Re-validated in 2003*

Measure	Literature Citation
1 Cervical Dilation < 3 cm on Decision to Admit,	Malone, MB, Fergal D.; Geary, MB, Michael; Chelmow, MD, David; Stronge, MD, John; Boylan, MD, Peter; and D'Alton, MD Mary.Prolonged Labor in Nulliparas: Lessons From the Active Management of Labor. Obstetrics & Gynecology, Vol. 88, No. 2, August 1996, pp. 211215
2 Induction, 37-41 Weeks	Berka, MD, Ronald J.; Dooley, MD, MPH, Sharon L.; Seyb, MD, Stacy T.; and Socol, MD, Michael L.; Department of Obstetrics and Gynecology, Northwestern University Medical School, Northwestern Memorial Hospital, Chicago, Illinois. "Risk of Cesarean Delivery With Elective Induction of Labor at Term in Nulliparous Women," Obstetrics & Gynecology, Vol. 94, No. 4, October 1999, pp. 600-607. Castronova, Ph.D., Frank C. and Prysak, Ph.D., MD, Michael; Department of Obstetrics and Gynecology, St. John Hospital, Detroit, Michigan. "Elective Induction Versus Spontaneous Labor: A Case-Control Analysis of Safety and Efficacy," Obstetrics & Gynecology, Vol. 92, No. 1, July 1998, pp. 47-52 and pp. 1056-1057. Malone, MB, Fergal D.; Geary, MB, Michael; Chelmow, MD, David; Stronge, MD, John; Boylan, MD, Peter; and D'Alton, MD Mary.Prolonged Labor in Nulliparas: Lessons From the Active Management of Labor. Obstetrics & Gynecology, Vol. 88, No. 2, August 1996, pp. 211215 Maslow, DO, MSc, Arthur S. and Sweeny, MPH, Amy L.; Departments of Obstetrics, Maternal-Fetal Medicine, and Clinical Outcomes and Quality Improvement, Franciscan Health System, Tacoma, Washington. "Elective Induction of Labor as a Risk Factor for Cesarean Delivery Among Low Risk Women at Term," Obstetrics & Gynecology, Vol. 95, No. 6, Part 1, June 2000, pp. 917 - 922.

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Targets Approved by CLC: < insert date>
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	Rogers, MD, Rebecca; Gilson, MD, George J.; Miller, MD, Anthony C.; Isquierdo, MD, Luis E.; Curret, MD, Luis B,: and Qualls, PhD, Clifford. Active management of labor: Does it make a difference? American Journal Ovstetrics and Gynecology, September 1997, pp.599 – 605.
3. Episiotomy	Delancey J.O.L., Toglia M.R., Perucchini D: Internal and External Anal Sphincter Anatomy as it Relates to Midline Obstetric Lacerations. Obstetrics & Gynecology; December 1997 vol. 90 no. 6; 924-927 Eason E, Feldman P: Much ado about a little cut: Is episiotomy worthwhile? Obstetrics & Gynecology; April 2000 vol. 95; 616-618 Eason, MDCM, FRCSC Erica; Labrecquie, M.D., CCFP Michel; Wells, Ph.D. George; Feldman, MDCM, CCFP Perle: "Preventing Perineal Trauma During Childbirth: A Systematic Review" *Obstetrics & Gynecology* Vol. 95, No. 3, March 2000, pp. 464-471. Frigoletto, Jr., MD, Fredric, D; Lieberman, MD, Ellice; P.H., Dr; Lang, Ph.D., Janet, M.; Sc.D., Cohen, B.A, Amy; Barss, MD, Vanessa; Ringer, MD, Ph.D, Steven; Dattta, MD, Sanjay: A Clinical Trial of Active Management of Labor. *The New England Journal of Medicine*, Vol. 333, No. 12, September 1995, pp. 745 – 750. Lopez-Zeno, MD, Jose; Peaceman, MD, Alan, M; Adashek, MD, Joseph A; Socol, MD, Michael, L: A controlled Trial of a Program for the Active Management of Labor. *The New England Journal of Medicine*, February 1992, pp. 450 – 454. Peaceman, MD, Alan, M.; and Socol, MD, Michael L. Active Management of Labor. American Journal Obstetrics Gynecology; August 1996, pp. 363-368. Robinson J.N., Norwitz E.R., Cohen A.P., et al: Episiotomy, operative vaginal delivery, and significant perineal trauma in nulliparous women. Am J Obstet Gynecol; November 1999 vol. 181 no. 5 part 1; 1180-1184 Weber A.M., Meyn L: Episiotomy Use in the United States, 1979-1997. Obstetrics & Gynecology; December 2002 vol. 100 no. 6; 1177-1182 Zetterström J, López A, Anzén B, et al: Anal Sphincter Tears at Vaginal Delivery: Risk Factors and Clinical Outcome of Primary Repair. Obstetrics & Gynecology; July 1999 vol. 94 no. 1; 21-28
4 NTSV Cesarean Birth Rate	Freeman, MD Roger K.; Cohen, M.D. Arnold W.; Depp III, M.D. Richard; et. al Evaluation of Cesarean Delivery, American College of Obstetricians and Gynecologists, 2000
5 3rd/4th Degree Laceration	Bartram, FRCP, Clive I.; Hudson, M. Chir, Christopher N.; Kamm, MD, Michael A.; Sultan, MD, Ch.B., Abdul H. and Thomas, M. Sc., Janice M. "Anal-Sphincter Disruption During Vaginal Delivery," *The New England Journal of Medicine*, Vol. 329, No. 26, December 1993, pp. 1906-1911. Crawford, MD, Lisa A.; DeLancey, MD, John O. L.; Pearl, MD, Michael L. and Quint, MD, Elisabeth H.; Department of Obstetrics & Gynecology, University of Michigan Medical Center, Ann Arbor, Michigan. "Incontinence Following Rupture of the Anal Sphincter During Delivery," *Obstretics & Gynecology* Vol. 82, No. 4, Part 1, October 1993, pp. 527- 531. Kammerer-Doak, M.D. Dorothy N.; Wesol, M.D. Adrianne B.; Rogers, M.D. Rebecca G.; et al "A prospective cohort study of women after primary repair of obstetric anal sphincter laceration" *American Journal of Obstetrics and Gynecology* Vol. 181, No. 6, 1999, pp. 1317-1323. Sultan, M.B., Ch.B. Abdul H.; Kamm, M.D. Michael A.; Hudson, M.Chir. Christopher N.; et al: "Anal-sphincter disruption during

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	vaginal delivery" *The New England Journal of Medicine* Vol. 329, No. 26, December 1993, pp. 1905-1911. Toglia, M.D. Marc R.; DeLancey, M.D. John O.L.: "Anal Incontinence and the obstetrician-gynecologist" *Obstetrics & Gynecology* Vol. 84, No. 4, Part 2, October 1994, pp. 731-740. Zetterström J, López A, Anzén B, et al: Anal Sphincter Tears at Vaginal Delivery: Risk Factors and Clinical Outcome of Primary Repair. Obstetrics & Gynecology; July 1999 vol. 94 no. 1; 21-28
6. Low 5-Minute Apgar Score per Thousand	